BY ORDER OF THE SECRETARY OF THE AIR FORCE

AIR FORCE INSTRUCTION 11-2 FT VOLUME 2



12 MARCH 2007

Incorporating Through Change 3, 30 MARCH 2015

Flying Operations

FLIGHT TEST AIRCREW EVALUATION CRITERIA

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ACCESSIBILITY: Publications and forms are available for downloading or ordering on the e-

publishing website at: www.e-publishing.af.mil

RELEASABILITY: There are no releasability restrictions on this publication.

OPR: HQ AFMC/A3V Certified by: HQ USAF/A3O

(Brig Gen Robert C. Kane)

Pages: 94

Supersedes: AFI11-2FTV2, 14 July 2004

This instruction implements AFPD 11-2, Aircraft Rules and Procedures; AFPD 11-4, Aviation Service; and AFI 11-202V2, Aircrew Standardization/Evaluation Program. The purpose of this publication is to provide evaluation criteria for Flight Test Aircrew to be used during required evaluations. It applies to all AFMC units and AFMC gained flying units and personnel. This supplement does not apply to the Air National Guard or US Air Force Reserve units and members except those under AFMC OPCON. Field units below MAJCOM level will forward copies of their proposed supplements to this publication to AFMC/ A3V for review and approval prior to publication. Keep supplements current by complying with AFI 33-360, Publications Management Program. See paragraph 1.2 of this instruction for guidance on submitting waivers to this publication. See paragraph 1.2 of this instruction for guidance on submitting comments and suggesting improvements to this publication. This instruction is affected by the Paperwork Reduction Act as amended in 1996. The Privacy Act of 1974 affects this instruction. The Privacy Act System Number F011 AF XO A, Aviation Resource Management System (ARMS) covers required information. The authority for maintenance of the system is Title 37 U.S.C. 301a (Incentive Pay), Public Law 92-204, Section 715 (Appropriations Act for 1973), Public Laws 93-570 (Appropriations Act for 1974), 93-294 (Aviation Career Incentive Act of 1974), and Executive Order 9397. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 37-123, Management of Records and disposed of in accordance with Air Force Records Disposition Schedule (RDS) located at https://afrims.amc.af.mil.

SUMMARY OF CHANGES

This interim change adds Tiering to all required paragraphs. This interim change affects the following paragraphs: Permits the SEFE to fly in an aircraft not qualified in (paragraph 1.3.2); Amends Helicopter General Criteria (Table 1.1); Permits common access publications to fulfill personal publication requirements (paragraph 1.6); Clarifies that all evaluations are flight evaluations with exceptions (paragraph 2.1.1); Expanded RQ-4 instrument evaluation requirements (paragraph 2.2.2); Expands guidance in required in-flight events (Paragraphs 2.2.3.3-2.2.4); Expands and clarifies guidance on evaluation types (paragraphs 2.3 – 2.6); Clarifies and expands pilot evaluation criteria (Attachment 2); Clarifies and expands WSO/Navigator/OSO/EWO/DSO evaluation criteria (Attachment 3); Replaces Attachment 4 in its entirety; Expands and replaces SO criteria for specific events (Attachment 6); Clarifies Knowledge of Directives and Systems Knowledge in Attachments 7 and 8. A margin bar (|) indicates newly revised material.

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Chapter 1

GENERAL INFORMATION

- **1.1. General.** AFMC/A3V is the OPR for the three-volume set of Flight Test (FT) instructions containing attachments for each weapon system flown in AFMC. These instructions are numbered AFI 11-2FT Volume 1, 2, and 3, and will contain the training, evaluation criteria, and operations procedures, respectively, for each weapon system. AFMC uses these instructions in lieu of AFI 11-2 MDS-Specific Volumes for flying operations. In the absence of published guidance AFMC units will coordinate with HQ AFMC/A3V for approval of locally developed guidelines. These guidelines should be consistent with similar guidance specified in the appropriate AFI 11-2 MDS-Specific volumes. In addition, aircraft on loan to AFMC undergoing short-term flight test programs will be flown according to the lead MAJCOM guidance if no AFMC AFI 11-2FT-series or other guidance exists (T-2).
 - 1.1.1. All evaluations will be conducted IAW the provisions of AFI 11-202, Volume 2 and this instruction. Information gathering documents will be established as forms in accordance with AFI 33-360, *Publications and Forms Management*.
- **1.2. Recommended Changes/Waivers.** Recommendations for improvements to this instruction will be submitted on AF Form 847, *Recommendation for Change of Publication*, to AFMC/A3V. IAW AFPD 11-2, AF/A3O is approval authority for interim changes/revisions to this instruction. Waiver authority for this instruction is AFMC/A3. Waivers will be requested through AFMC/A3V.

1.3. Procedures:

- 1.3.1. Stan/Eval Flight Examiners (SEFE) will use the evaluation criteria contained in **Attachment 2** through **Attachment 7** for conducting all flight evaluations and paragraph **1.5** for all emergency procedures evaluations. To ensure standard and objective evaluations, SEFEs will be thoroughly familiar with the prescribed evaluation criteria. If guidance published in this volume is not sufficient or does not apply (for example; U-2), follow lead MAJCOM guidance.
- 1.3.2. Unless specified, the examinee or SEFE may fly in any flight position (to include chase) which will best enable the SEFE to conduct a thorough evaluation. If dual qualified, the SEFE may administer the evaluation from the chase position in a similar mission and category aircraft (e.g., F-15, F-16, F-22). The SEFE may administer the evaluation from the rear cockpit of an aircraft they are not qualified in. The Evaluator will log EP time. Use the remarks section of the Form 4327 and AFTO Form 781 to explain.
- 1.3.3. The SEFE will brief the examinee on the purpose of the evaluation and how it will be conducted prior to flight. The examinee will accomplish required flight planning in accordance with the flight position during the evaluation. Flight Examiners will be furnished a copy of necessary mission data, and mission materials.
- 1.3.4. The SEFE will thoroughly debrief all aspects of the flight. This debrief will include the examinee's overall rating, specific deviations, area grades assigned (if other than qualified) and any required additional training.

- **1.4. Grading Instructions.** This instruction and its attachments contain the standards and criteria for conducting evaluations in AFMC aircraft. These standards when applied with SEFE judgement are the determining factor in awarding subarea and overall evaluation grades.
 - 1.4.1. The SEFE will evaluate flight parameters based on conditions of smooth air and a stable aircraft. Do not consider momentary deviations from tolerances, provided the examinee applies prompt corrective action and such deviations do not jeopardize flying safety. The SEFE will consider cumulative deviations when determining the overall grade.
 - 1.4.2. The SEFE will evaluate each area accomplished during the evaluation using the standards provided in this instruction and assign an appropriate grade for the area. Derive the overall flight evaluation grade from a composite of the area grades. SEFE judgment must be exercised when the wording of areas is subjective and when specific situations are not covered. SEFE judgment will be the determining factor in arriving at the overall grade.
 - 1.4.3. If the examinee receives an unqualified grade in any critical area, an overall unqualified grade will be assigned.
 - 1.4.4. The following general criteria apply during all phases of flight except as noted for specific events and on instrument final approaches:

	1 1	α	O 14
1 abie	1.1.	General	Criteria.

		Fixed Wing	Helicopter Pilot	Navigator/WSO	UAS Pilot (1)			
		Pilot	_					
Q	Altitude	+/- 200 Feet	+/- 200 Feet	+/- 150 Feet	+/- 200 Feet			
	Airspeed	+/- 5%	+/- 10 KIAS	+/- 5%	+10 / -5 KIAS			
	Course	+/- 5 degrees/3	+/- 5 degrees/3	+/- 5 degrees/3	+/-20 degrees/1.5			
		NM (Whichever	NM (Whichever is	NM (Whichever is	NM Whichever is			
		is greater)	greater)	greater	greater			
	TACAN Arc	+/- 2 NM	+/- 2 NM	+/- 2 NM	N/A			
Q-	Altitude	+/- 300 Feet	+/- 300 Feet	+/- 250 Feet	+/- 300 Feet			
	Airspeed	+/- 10%	+/- 20 KIAS	+/- 10%	+15 / -7 KIAS			
	Course	+/- 10 degrees/5	+/- 10 degrees/5	+/- 10 degrees/5	+/-30 degrees/3			
		NM (Whichever	NM (Whichever is	NM (Whichever is	NM Whichever is			
		is greater)	greater)	greater)	greater			
	TACAN Arc	+/- 3 NM	+/- 3 NM	+/- 3 NM	N/A			
U		Exceeded Q-	Exceeded Q-	Exceeded Q-	Exceeded Q-			
		Tolerances	Tolerance's	Tolerance's	Tolerance's			
Not	Note 1: This table is not applicable to RQ-4 evaluations.							

- **1.5. Emergency Procedures Evaluation (EPE).** Aircrew will be administered EPEs. Use an ATD to perform EPEs (when available and properly configured) to the maximum extent possible. If an ATD is not used, the EPE will be conducted in an appropriate unit training device (UTD) or cockpit procedures trainer (CPT), in order of preference. If a CPT is not used, the EPE will be an oral evaluation.
 - 1.5.1. The following items, as applicable, will be included on all emergency procedures evaluations:
 - 1.5.1.1. Aircraft General Knowledge.

- 1.5.1.2. Emergency Procedures. Evaluate a minimum of two emergency procedures per phase of flight (i.e., pre-takeoff, takeoff, cruise and landing). All Bold Face/CAPS will be evaluated (if applicable).
- 1.5.1.3. Crew Resource Management (CRM).
- 1.5.1.4. Unusual attitude recoveries will be evaluated IAW AFMAN 11-217, *Instrument Flight Procedures*, during all EPEs. If performed in an ATD, this fulfills the requirement for Unusual Attitude Recoveries on Pilot Instrument/Qualification evaluations.
- 1.5.2. The following additional items will be included on EPEs as a requisite for the instrument and/ or qualification evaluation (if applicable):
 - 1.5.2.1. Evaluate use of standby/emergency instruments.
 - 1.5.2.2. Alternate/Divert Airfields. Evaluate a minimum of one approach at an airfield other than the base/airfield of assignment, mission & conditions permitting
 - 1.5.2.3. Evaluate loss of visual references in close proximity to the runway (low visibility landings) including use of night vision devices during takeoff/landing, if authorized.
 - 1.5.2.4. Evaluate transition to instruments in a spatial disorientation incident.
- 1.5.3. EPE scenarios should be tailored to unit tasking and should include emergencies occurring during situations an aircrew might encounter while flying the unit's mission (Functional Check Flight, Weapon Delivery, etc).
- 1.5.4. Examinees receiving an overall unqualified grade will be placed in supervised status until a re-evaluation is successfully accomplished. Examinees receiving an overall unqualified grade because of an unsatisfactory Bold Face/CAPS evaluation will not be permitted to fly in their aircrew position until a successful re-evaluation is accomplished. If examinee receives a grade of qualified with additional training required for an EPE, the SEFE will indicate if the additional training will be accomplished before the flight evaluation. Additional training and reevaluations will be accomplished IAW AFI 11-202, Vol 2.
- 1.5.5. The following grading criteria will be used to grade individual items on EPE's:
- Q: Performance is correct. Quickly recognizes and corrects errors.
- Q-: Performance is safe, with limited proficiency. Makes errors of omission or commission.
- U: Performance is unsafe or indicates lack of knowledge or ability.
- **1.6. Publications.** The examinee will submit their issued copy of required publications for evaluation. Digital TO's are approved for use by individual aircrew members. Common access publications may be used to fulfill this requirement. The examinee will demonstrate accessibility to all required publications. See AFI 11-215 for detailed guidance. Units that fly multiple variants of an MDS (ie AC-130H; MC-130H; HC-130P; C-130E) will declare one variant (ie C-130H) as the primary weapon system. Issue individual publications based on this determination.

Chapter 2

EVALUATION REQUIREMENTS

2.1. General.

- 2.1.1. All evaluations will follow the guidelines set in AFI 11-202, Vol 2, Chapter 5. The procedures outlined in this chapter apply to all flying units. All evaluations are flight evaluations. (T-2). Waivers to administer evaluations in a simulator will be considered on a case by case basis. Exception: Non-rated aircrew evaluations may be administered on the ground.
- 2.1.2. Required evaluation areas are contained in forms specified in AFMC Supplement to AFI 11-202V2. When it is impossible to evaluate a required area in flight, it will be evaluated by an alternate method (i.e., in an UTD/ATD/CPT or by oral examination). Document the reason a required area was not evaluated in-flight. Document method of evaluation in the Section D of the AF IMT 8, *Certificate of Aircrew Qualification*. If the SEFE determines the required item cannot be adequately evaluated by an alternate method, the examinee will require an additional flight to complete the evaluation.
- 2.1.3. Evaluate all issued flight publications for currency and accuracy on all flight evaluations. Units may specify additional publications to be evaluated in the unit supplement to AFI 11-202V2.
- **2.2. Instrument Evaluation.** A mission flown according to instrument flight rules (to the maximum extent practical) best fulfills the objective of the instrument evaluation. This evaluation will include approaches at airfields other than the base of assignment or deployed locations if possible. This evaluation may be administered on any compatible mission with the approval of the unit Chief of Stan/Eval and Commander's concurrence.
 - 2.2.1. The minimum ground phase requisite is the instrument examination.
 - 2.2.2. UAS Instrument Qualifications. MQ-1/9 pilots are required to take an instrument check utilizing their assigned aircraft. RQ-4 pilots will maintain instrument currency and rating in either an Air Force aircraft or a civil commercial aircraft capable of instrument flight and the requirements of this chapter.
 - 2.2.3. Minimum In-Flight Events.
 - 2.2.3.1. Precision Approach. One precision instrument approach must be flown. An Instrument Landing System (ILS)/Microwave Landing System (MLS); PAR; or RNAV (LPV) approach may fulfill this requirement. Any aircraft compatible precision approach type (ILS/MLS, PAR, or GPS) which is not executed during the flight evaluation will be evaluated via the ground evaluation.
 - 2.2.3.2. Non-precision Approach. Accomplish at least one non-precision approach.
 - 2.2.3.3. Holding. Every attempt should be made to accomplish the event. However, if mission constraints prevent accomplishment, this may be evaluated on the ground. For fighter/trainer aircraft, this event is desired but not required.

- 2.2.3.4. Penetration Descent. Every attempt should be made to accomplish the events. However, if mission constraints prevent accomplishment, this may be evaluated on the ground. N/A for aircraft listed in AFI 11-202 Vol 2, AFMC Supplement, Table 5.1 "Low Altitude Enroute Descent or Helicopter/Tiltrotor"
- 2.2.3.5. Circling Approach. Every attempt should be made to accomplish this event. It may be combined, as appropriate, with the Non-precision approach requirement. However, if mission constraints prevent accomplishment, this may be evaluated on the ground. For fighter/trainer aircraft, this event is desired but not required.
- 2.2.4. Unusual Attitudes. May be evaluated during EPEs or if evaluated in dual-seat aircraft in-flight, will be performed with a SEFE in the aircraft. Do not perform unusual attitude recoveries in single seat aircraft. Unusual attitudes will be verbally evaluated for cargo aircraft and their derivatives.
- **2.3. Qualification Evaluation.** A mission flown to demonstrate basic aircraft qualification. This evaluation will include the items listed in the applicable attachment Area A and Area B. The flight phase will include the items listed in Area C. No instrument approaches or procedures (holding, instrument penetration) are required.
 - 2.3.1. Minimum ground phase requisites are closed and open book examinations, EPE, and Bold Face/CAPS Written Exam. Answers must contain all Bold Face/CAPS items in proper sequence. Abbreviations are allowed.
 - 2.3.2. Minimum In-Flight events. (Pilot)
 - 2.3.2.1. All full flap and partial flap pattern and landings are required. Touch and Go landings are required for T/GO certified MP and all IPs.
 - 2.3.2.2. Emergency pattern work (engine(s) out landing, engine(s) out go-around, no flap landing, partial flap landing, SFO) as applicable to aircraft systems and configurations is required. Unit supplements may provide detailed MD guidance. See AFI 11-2FT Vol 3 for additional guidance for allowable emergency pattern work.
 - 2.3.2.3. VFR traffic patterns are required. This event may be graded during a circling approach when weather is below VFR pattern minimums.
 - 2.3.3. Navigators and WSOs with a set of flight controls or flight instruments at their crew position will complete the instrument exam as a requisite for the qualification evaluation.
 - 2.3.4. Pilots and WSOs/navigators will be evaluated on compliance with National Airspace System Rules and procedures. Particularly, evaluate compliance with minimum safe maneuvering airspeeds below 10,000 feet MSL using criteria in **Table 1.1**, as well as using all means available to ensure safe operations (e.g., Flight following during VFR operations). Mission planning will also be graded for adequate consideration of potential hazards during low level operations including, but not limited to: high traffic areas, other military training route crossing points/deconfliction, noise sensitive areas, no-fly areas and abort considerations.
 - 2.3.5. Electronic Warfare Officer grading criteria may be supplemented and published in the unit supplement to this Instruction.
 - **2.3.6. DELETED**

- 2.3.7. Nav/CSO/WSO/EWO: Qualification is gained by completion of QUAL evaluation which consists of MQF closed book exam, unit developed open book exam, IRC, instrument exam, boldface/CAPS, EPE, and flight evaluation. The closed book exam is derived from the full —pilot MQF (applicable blocks/MDS flight qual) in aircraft for which an MDS specific CSO MQF is not available. See AFI 11-2FT Vol 1 Para 2.9 for Nav/WSO/EWO qualification for the C-12, F-16, and T-38.
- **2.4. Mission Evaluation.** The requirement for a mission evaluation for AFMC aircrews is waived according to the provisions of AFI 11-202V2, Chapter 5. However, evaluators should attempt to include mission type events on a qualification evaluation. Mission type events include any Phase II area such as: aerobatics; confidence maneuvers; safety chase; approaches to stalls; BFM; flight test techniques; formation; basic weapons deliveries; and functional checks. The mission section of the evaluation sheets contains four areas to be evaluated if mission type events are accomplished on a qualification evaluation.

2.5. Instructor Evaluation.

- 2.5.1. Initial Instructor and Instructor Requalification evaluations will be conducted IAW AFI 11-202, Vol 2, Chapter 5. All instructor candidates will receive an EPE as a prerequisite for all initial and RQ instructor evaluations. Using unit EPE guides, initial instructor candidates will demonstrate the ability to provide emergency procedures instruction. This is a one-time check which verifies the candidates ability to instruct in various phases of the unit's mission and aircraft. Flight evaluations will include a thorough evaluation of the examinee's instructor knowledge and ability. Except for requirements detailed on AFMC Evaluation Sheets (AFMC Form 59 overprint), specific profiles and/or events will be determined by the SEFE. Initial and Requal Instructor Evaluations will include the applicable portions of the following sections: General; Ground; Qualification; and Instructor. RCP (SPOT) evaluations for acceptance of instructor qualification will expire on the same date as the current qualification evaluation.
- 2.5.2. All subsequent periodic evaluations (for example, Instrument, Qualification, Mission) will include instructor portions during the evaluations. For units whose instructor pilots (IP) normally instruct from a chase aircraft, the examinee should fly a portion of the mission in the chase position, if feasible. A rear cockpit (RCP) landing for applicable fighter and T-38 will be evaluated. The RCP portion of the evaluation will include an overhead and emergency pattern(s). If a second sortie to complete the RCP landing portion of the evaluation is needed, see AFI 11-202 Vol 2 for guidance on additional sortie documentation.
- **2.6. Spot Evaluation.** Spot evaluations will be conducted IAW AFI 11-202, Vol 2, Chapter 5. A SPOT evaluation is an evaluation not intended to satisfy the requirements of a periodic (i.e., INSTM, QUAL, MSN, INSTR) evaluation. A spot has no particular requisites or requirements, but may be converted into a periodic evaluation if all of the requirements for that evaluation are met. SEFE objectivity evaluations will be documented as SPOT evaluations.
- **2.7. Evaluation Instructions.** Requirements for all aircrew evaluations are identified in forms as specified in AFMC Supplement to AFI 11-202V2. Each crew position has specific section C requirements and evaluation criteria. Use forms specified in AFMC Supplement to AFI 11-202V2 for conducting all aircrew evaluations. To conserve flying resources, units should make every attempt to combine evaluations (for example INSTM/QUAL examinations should be combined to the maximum extent possible).

2.8. Forms Adopted. Moved to Attachment 1

CARROL H. CHANDLER, Lt Gen, USAF DCS, Operations, Plans & Requirements

ATTACHMENT 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFPD 10-9, Lead Command Designation and Responsibilities for Weapon Systems

AFPD 11-2, Aircrew Operations, 19 Jan 2012

AFPD 11-4, Aviation Service, 1 Sep 2004

AFI 11-2FT-Volume 1, Flight Test Aircrew Training, 19 Sep 2005

AFI 11-2FT- Volume 3, Flight Test Operations Procedures, 28 May 2005

AFMCI 11-201, Supervision of Flight Operations, 15 Dec 1999

AFI 11-202V1, Aircrew Training, 22 Nov 2010

AFI 11-202V2, Aircrew Standardization/Evaluation Program, 13 Sep 2010

AFI 11-202V3, General Flight Rules, 7 Nov 2014

AFH 11-203V1, Weather for Aircrews, 12 Jan 2012

AFI 11-205, Aircraft Cockpit and Formation Flight Signals, 19 May 1994

AFI 11-207, Combat Aircraft Delivery, 24 Oct 2007

AFI 11-209, Aerial Event Policy and Procedures, 4 May 2006

AFMAN 11-210, Instrument Refresher Program (IRP), 3 Feb 2005

AFI 11-214, Air Operations Rules and Procedures, 14 Aug 2012

AFI 11-215, USAF Flight Manuals Program (FMP), 22 Dec 2008

AFPAM 11-216, Air Navigation, 1 Mar 2001

AFMAN 11-217 V1, Instrument Flight Procedures, 22 Oct 2010

AFMAN 11-217 V2, Visual Flight Procedures, 22 Oct 2010

AFI 11-218, Aircraft Operations and Movement on the Ground, 28 Oct 2011

AFI 11-230, Instrument Procedures, 27 Sep 2013

AFI 11-290, Cockpit/Crew Resource Management Training Program, 15 Oct 2012

AFI 11-301 V1, Aircrew Flight Equipment (AFE) Program, 25 Feb 2009

AFMAN 11-226, US Standard for Terminal Instrument Procedures (TERPS), 1 Nov 1999

AFI 11-2FT- Volume 3, Flight Test Operations Procedures, 16 Nov 2011

AFI 11-2FT-Volume 1, Flight Test Aircrew Training, 20 Sep 2011

AFI 33-360 Publications and Forms Management, 18 May 2006

AFI 11-401, Aviation Management, 10 Dec 2010

AFI 11-410, Personnel Parachute Operations, 4 Aug 2008

AFPAM 11-419, G-Awareness for Aircrew, 17 Oct 2014

AFI 13-202, Overdue Aircraft, 11 Mar 2010

AFI 13-212, Range Planning and Operations, 16 Nov 2007

AFPD 33-3, Information Management, 8 Sep 2011

AFI 33-322, Records Management, 4 Jun 2012

AFI 33-360 Publications and Forms Management, 25 Sep 2013

AFMAN 37-123, Management of Records, 31 Aug 94

T.O. 1-1-300, Functional Check Flight Procedures, 15 Mar 2012

FAAH 7610.4K, Special Military Operations, 19 Feb 2004

NOTES:

- 1. The entire AFTTP3-1 and 3-3 series of instructions contains useful reference information for areas not specifically covered in the instruction and may be used to enhance safe operations.
- 2. Guidance in aircraft Flight Manuals, performance manuals, weapons delivery manuals, air refueling manuals and Technical Orders are the primary references for operation of the corresponding aircraft.

Adopted Forms

AF Form 8, Certificate of Aircrew Qualification

AF Form 847, Recommendation for Change of Publication

AF Form 8a, Certificate of Aircrew Qualification (Multiple Aircraft)

AFMC Form 73, AFMC Flight Operations Waiver Request.

Abbreviations and Acronyms

ACC—Air Combat Command

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFMC—Air Force Materiel Command

AFMCI—Air Force Materiel Command Instruction

AFPAM—Air Force Pamphlet

AFRC—Air Force Reserve Command

AFTTP—Air Force Tactics, Techniques, and Procedures

AGL—above ground level

AGM—Air to Ground Missile

AMC—Air Mobility Command

AOA—Angle of Attack

APU—auxiliary power unit

ASR—Airport Surveillance Report

ATC—Air Traffic Control

ATD—aircrew training device

BFM—Basic Fighter Maneuver

CAPS—Critical Action Procedures

CC—Commander

COMSEC—Communications Security

CPT—cockpit procedures trainer

CRM—Crew Resource Management

DH—decision height

DO—Director of Operations

DR—dead reckoning

DSO—Defensive Systems Officer

DZ—Drop Zone

ECM—Electronic Countermeasures

EP—Evaluator Pilot/emergency procedure

EPE—Emergency Procedures Evaluation

ETA—Expected Time of Arrival

EVS—Electro-Optical Viewing System

EWO—Electronic Warfare Officer

FAAH—Federal Aviation Administration Handbook

FAR—Federal Aviation Regulation

FCIF—Flight Crew Information File

FLIP—Flight Information Publications

GPS—Global Positioning System

HF—high frequency

HQ—Headquarters

IAW—in accordance with

ICAO—International Civil Aviation Organization

IFR—Instrument Flight Rules

ILS—Instrument Landing System

IP—Instructor Pilot or Initial Point

IR—IFR Military Training Route

IRC—Instrument Refresher Course

KIAS—knots indicated airspeed

LZ—Landing Zone

MAJCOM—Major Command

MAP—Missed Approach Point

MC—Mission Capable/Mission Commander

MDS—Mission Design Series

MDA—Minimum Descent Altitude

MSA—Minimum Safe Altitude

MSL—mean sea level

N/A—Not Applicable

NM—nautical miles

OG—Operations Group

OPR—Office of Primary Responsibility

OSO—Offensive Systems Officer

PAR—Precision Approach Radar

RDT&E— Research Developmental Test and Evaluation

RPM—revolutions per minute

SAR—synthetic aperture radar

SD—Senior Director

SEFE—Stan/Eval Flight Examiner

SFO—simulated flame out

STAN/EVAL—Standardization & Evaluation

TA—terrain avoidance

TACAN—Tactical Air Navigation

TERPS—Terminal Instrument Procedures

UHF—Ultra High Frequency

USAF—United States Air Force

UTD—unit training device

VDP—Visual Descent Point

VOR—VHF Omni Range

VFR—Visual Flight Rules

VHF—Very High Frequency

VMC—Visual Meteorological Conditions

WSO—Weapons Systems Officer

Terms

Airlift—Aircraft is considered to be performing airlift when manifested passengers or cargo are carried.

Allowable Cabin Load (ACL)—The maximum payload that can be carried on an individual sortie.

Alternate Entry Control Point (Alternate Entry Fix)—The route point(s) upon which a control time for an alternate entry into the route is based.

Assault Landing Zone (ALZ)—A paved or semi-prepared (unpaved) airfield used to conduct operations in an airfield environment similar to forward operating locations. ALZ runways are typically shorter and narrower than standard runways.

Augmented Crew—Basic aircrew supplemented by additional qualified aircrew members to permit in-flight rest periods.

Bingo Fuel—The computed fuel remaining at a point in flight that will allow safe return to the point of intended landing with required fuel reserve.

Block Time—Time determined by the scheduling agency responsible for mission accomplishment for the aircraft to arrive at (block in) or depart from (block out) the parking spot.

Category I Route—Any route that does not meet the requirements of a category II route, including tactical navigation and over-water routes.

Category II Route—Any route on which the position of the aircraft can be accurately determined by the overhead crossing of a radio aid (NDB, VOR, TACAN) at least once each hour with the positive course guidance between such radio aids.

Circular Error Average (CEA)—Indicator of the accuracy of an airdrop operation. It is the radius of a circle within which half of the air-dropped personnel and items or material have fallen.

Combat Control Team (CCT)—A small task organized team of Air Force parachute and combat diver qualified personnel trained and equipped to rapidly establish and control drop, landing, and extraction zone air traffic in austere or hostile conditions. They survey and establish terminal airheads as well as provide guidance to aircraft for airlift operation. They provide command and control, and conduct reconnaissance, surveillance, and survey assessments of potential objective airfields or assault zones. They also can perform limited weather observations and removal of obstacles or unexploded ordinance with demolitions. Also called CCT.

Command Chief Pilot—An aircrew assigned to HQ AFMC/A3V or an appointee that assists the HQ Stan/Eval team and conducts flight evaluations on behalf of the headquarters

Conference SKYHOOK—Communication conference available to help aircrews solve in-flight problems that require additional expertise.

Critical Phase of Flight—Takeoff, low level (below MSA), airdrop, weapon delivery, air refueling, approach, and landing.

Deadhead Time—Duty time for crewmembers positioning or de-positioning for a mission or mission support function and not performing crew duties. Crewmembers will by listed on the flight authorization, but will log "other" time IAW AFI11-401. See AFI 11-202Vol 3 Chap 9 for further restrictions.

Deviation—A deviation occurs when takeoff time is not within -20/+14 minutes of scheduled takeoff time.

Difference (conversion) Evaluation—An evaluation administered to an aircrew qualified in a variant of a particular aircraft. For example, variants of the B-707 airframe, different series of a particular M/D, or different block versions. Difference training is considered Phase I (initial qualification) training.

Direct Instructor Supervision—Supervision by an instructor of like specialty with immediate access to controls (for pilots, the instructor must occupy either the pilot or copilot seat).

Drop Zone (**DZ**)—A specified area upon which airborne troops, equipment, or supplies are airdropped.

Due Regard—Operational situations that do not lend themselves to International Civil Aviation Organization (ICAO) flight procedures, such as military contingencies, classified missions, politically sensitive missions, or training activities. Flight under "Due Regard" obligates the military aircraft commander to be his or her own air traffic control (ATC) agency and to separate his or her aircraft from all other air traffic. (See FLIP General Planning, section 7)

DZ Entry Point—A fixed point on DZ run-in course where an aircraft or formation or aircraft may safely begin descent from IFR en route altitude to IFR drop altitude. The DZ entry point is a maximum of 40 NM prior to the DZ exit point according to Federal Aviation Administration FAR exemption 4371C. Formation descent will not begin until the last aircraft in formation is at or past the DZ entry point.

DZ Exit Point—A fixed point on the DZ escape flight path centerline, established during premission planning, at which the formation will be at the minimum IFR en route altitude. Calculate the exit point based upon three-engine performance at airdrop gross weight. This point will be planned no less than four NM track distance beyond the DZ trailing edge.

Earliest Descent Point (EDP)—Earliest point in the DZ run-in course where the lead aircraft may begin IFR descent to IFR drop altitude and be assured of terrain clearance for the entire formation. Compute EDP by subtracting formation length from the computed DZ entry point.

Equal Time Point—Point along a route at which an aircraft may either proceed to destination or first suitable airport or return to departure base or last suitable airport in the same amount of time based on all engines operating.

End Maneuver Area (EMA)—A control point terminating the bomb run area.

Entry Control Time—The scheduled time over the Primary/Alternate Entry Control Point.

Entry Track—A track, usually associated with a bomber IR and beginning at the Primary or alternate Entry Point, along which descent is made to the low altitude portion of the route.

Estimated Time In Commission (ETIC)—Estimated time required to complete required maintenance. Used by maintenance in increments up to mission cancel time.

Evaluation Form—Worksheet used to document any evaluation to prepare the AF Form 8.

Execution—Command-level approval for initiation of a mission or portion thereof after due consideration of all pertinent factors. Execution authority is restricted to designated command authority.

Familiar Field—An airport in the local flying area at which unit assigned aircraft routinely perform transition training. Each operations group commander will designate familiar fields within their local flying area.

Fix—A position determined from terrestrial, electronic, or astronomical data.

Fuel—Normal Fuel-Fuel state on initial or at the final approach fix such that the aircraft can land with the fuel reserves specified in 11-2FT Vol. 3.

Minimum Fuel—Fuel state, where, upon reaching the destination, the aircraft can accept little or no delay. This is not an emergency situation but merely indicates an emergency situation is possible should any undue delay occur.

Emergency Fuel—Fuel state requires immediate traffic priority to safely recover the aircraft. An emergency will be declared and the aircraft immediately recovered at the nearest suitable field.

Global Decision Support System (GDSS)—AMC primary execution command and control system. GDSS is used to manage the execution of AMC airlift and tanker missions.

Hazardous Cargo or Materials (HAZMAT)—Articles or substances that are capable of posing significant risk to health, safety, or property when transported by air and classified as explosive (class 1), compressed gas (class 2), flammable liquid (class 3), flammable solid (class 4) oxidizer and organic peroxide (class 5), poison and infectious substances (class 6), radioactive material (class 7), corrosive material (class 8), or miscellaneous dangerous goods (class 9). Classes may be subdivided into divisions to further identify hazard (i.e., 1.1, 2.3, 6.1, etc.).

Initial Cadre—Those personnel assigned to conduct flight testing of experimental, developmental, or new aircraft for which there are no established formal training programs nor standardized evaluation criteria. Initial Cadre designations are appropriate through Initial Operational Capability.

Instructor Supervision—Supervision by an instructor of like specialty (see also Direct Instructor Supervision).

Inter—fly-The exchange and/or substitution of aircrews and aircraft between Mobility Air Forces (MAF) including crewmembers and/or aircraft from AETC, ACC, PACAF, USAFE, AMC, ANG and AFRC forces not gained by AFMC.

Jumpmaster—The assigned airborne qualified individual who controls parachutists from the time they enter the aircraft until they exit.

Knock—it-Off-A term any crewmember may call to terminate a training maneuver. Upon hearing "knock-it-off" the crew should establish a safe altitude, airspeed and return the aircraft power and flight controls to a normal configuration.

Landing Zone (**LZ**)—An area of sufficient size to allow discharge or pickup of passengers or cargo by touchdown or low hover.

Latest Descent Point—Latest planned point on the DZ run-in course where the formation plans to initiate descent to drop altitude. This is planned to ensure all aircraft in the formation are stabilized (on altitude and airspeed) prior to the drop.

Lead Crew—A crew consisting of a lead qualified aircraft commander and a lead qualified navigator.

Letter of "X"s—A document used in AFMC, signed by appropriate authority, that lists each assigned/attached aircrew's aircraft designation, crew position, and mission qualifications.

Local Training Mission—A mission scheduled to originate and terminate at home station (or an off-station training mission), generated for training or evaluation and executed at the local level.

Low Altitude Navigation Leg—The route segments of a bomber IR between the TA Initiation Point and TA Termination Point. For non-bomber IR, the low altitude navigation leg is that portion of the route designed primarily for low altitude flight; does not include segments intended for descent into and climb-out from the route.

Maintenance Status—Code 1 - No maintenance required.

Code 2 (Plus Noun)—Minor maintenance required, but not serious enough to cause delay. Add nouns that identify the affected units or systems, i.e. hydraulic, ultra high frequency (UHF) radio, radar, engine, fuel control, generator, etc. Attempt to describe the nature of the system malfunction to the extent that appropriate maintenance personnel will be available to meet the aircraft. When possible, identify system as mission essential (ME) or mission contributing (MC).

Code 3 (Plus Noun)— Major maintenance. Delay is anticipated. Affected units or systems are to be identified as in Code 2 status above.

Manmade Obstructions—Structures that present a hazard to flight. Structure height is measured from the ground-base.

Mark—The time when an aircraft passes over the landing zone or ground party.

Military Airspace Management System (MASMS)—The term MASMS in this instruction refers to Detachment 1, HQ ACC/DOR, the Military Airspace Management System Office at Offutt AFB, NE.

MASMS IR Route—A route scheduled through Det 1, HQ ACC/DOSR using the MASMS scheduling system.

Mission—1. The task, together with the purpose, that clearly indicates the action to be taken and the reason therefore. 2. In common usage, especially when applied to lower military units, a duty assigned to an individual or unit; a task. 3. The dispatching of one or more aircraft to accomplish one particular task.

Mission Contributing (MC)—Any degraded component, system, or subsystem which is desired, but not essential to mission accomplishment.

Mission Essential (ME)—A degraded component, system, or subsystem which is essential for safe aircraft operation or mission completion.

Modified Contour—Flight in reference to base altitude above the terrain with momentary deviations above and below the base altitude for terrain depressions and obstructions to permit a smooth flight profile.

Non—MASMS IR Route-A route in which scheduling activity in AP/1B is other than Det 1, HQ ACC/DOSR.

Off Station Training Flight—A training flight that originates or terminates at other than home station that is specifically generated to provide the aircrew experience in operating away from home station. Off station trainers will not be generated solely to transport passengers, cargo, or position/deposition crewmembers.

Operational Risk Management (ORM)—A logic-based common sense approach to making calculated decisions on human, material, and environmental factors before, during, and after Air Force operations. It enables commanders, functional managers and supervisors to maximize operational capabilities while minimizing risks by applying a simple systematic process appropriated for all personnel and Air Force functions.

Operational Site—An LZ that has (1) been surveyed by an instructor pilot (IP) experienced in remote operations to ensure no hazards exist, (2) a photograph available for aircrews to study the site prior to landing and (3) approval from the OG/CC to be designated an operational site. Whenever practical, operational sites should have permanently installed and properly maintained wind indicators (wind sock, streamer, etc.).

Opportune Airlift—Transportation of personnel, cargo, or both aboard aircraft with no expenditure of additional flying hours to support the airlift.

Originating Station—Base from which an aircraft starts on an assigned mission. May or may not be the home station of the aircraft.

Over Water Flight—Any flight that exceeds power off gliding distance from land.

Primary /**Alternate Exit Point**—The final way-point published in FLIP for the primary or alternate exit route. For bomber IR, the final point on the climb-out track. For other routes, may coincide with the final TA Termination Point.

Primary/Alternate TA Initiation Point (Initial/Start TA)—The way-point at which aircrew are authorized to begin TA operations.

Primary/Alternate TA Termination Point (Final/End TA)—The point which denotes the end of TA operations.

Primary Entry Control Point (PECP)—Referred to as the Entry Fix. The route point upon which a control time for route entry is based.

Provisions—A statement on the front of the AF Form 8 indicating conditions for which the evaluation may satisfy recurring evaluation requirements, usually used for no-notice or out-of-the-eligibility-period evaluation. For example: "Provision: Open and closed book exams due NLT 30 Apr 97."

Reentry Track—A track, commencing at the end of a Maneuver Area, on which low altitude reentry to the route can be achieved to execute additional bomb/ECM/AGM runs.

Restriction—A statement on the front of the AF Form 8 that places limitations on the duties that may be performed by an aircrew, usually as a result of a failed ground or flight phase event. For example, "Restriction: Examinee will not fly unless under the supervision of an instructor pilot, Day Only, Conus Only".

Route Width (Route Perimeter)—The route boundary limits within which aircraft are restricted to conduct operations.

Senior Flight Examiner—A commander authorized to conduct SPOT evaluations for assigned/attached aircrews.

Significant Meteorological Information (SIGMET)—Area weather advisory issued by a civilian ICAO meteorological office. These advisories are issued at very high frequency omnidirectional range (VOR) facilities and may also be available via local Weather Flight, Operational Weather Squadron or Air Force Weather Agency web pages. SIGMET advisories are issued for tornadoes, lines of thunderstorms, embedded thunderstorms, large hail, severe and extreme turbulence, severe icing, volcanic ash, and widespread dust or sand storms. SIGMET reports frequently covers a large geographical area and vertical thickness. They are prepared for general aviation and may not consider aircraft type or capability.

Squadron Top 3—Squadron ADO, DO, CC.

Stabilization Point—Point on the DZ run-in course at which the lead aircraft should plan to be stabilized at drop altitude and airspeed. This point will be planned to be at least 6 NM prior to the point of impact.

Station Time—In air transport operations, the time at which crews, passengers, and cargo are to be on board and ready for the flight.

Start Maneuver Area (**SMA**)—The point that defines the start of the bomb run area. Timing control must be within applicable tolerances.

Suitable Airfield (C-130) Normally—suitable airfields are those which meet C-130 weather, fuel, and runway requirements (chapter 6) are within 50 NM of flight plan course centerline.

Temporary-2 (**T-2**) **Modification**—T-2 modifications are temporary modification required to support research, development, test, and evaluation (RDT&E), in service testing of potential replacement items (form, fit, and function), and for aircraft/stores compatibility testing.

Tactical Event (C-130)—Airdrop, low level, formation, and threat avoidance approaches/departures.

TA Visual Conditions (B-52)—Weather conditions that permit aircraft operations clear of clouds, provide the pilots visual contact with the ground, and three miles forward visibility.

Terminal Fuel Flow (TFF) (C-130)—The fuel flow rate expected during the last hour at cruise altitude. It is the difference between the fuel required for en-route time plus one hour and fuel required for en-route time. TFF may also be computed using the T.O. 1C-130X-1-1 fuel flow table and the estimated aircraft weight at destination. Estimated gross weight is determined by subtracting fuel burn off from takeoff gross weight.

Terrain Avoidance (**TA**) (**B-52**)—Method of maintaining ground clearance by Terrain Trace, EVS, or Radarscope Interpretation as close the terrain as equipment, command directives, and crew judgment allow.

Time Out—See definition for "Knock it Off."

Training Mission—Mission executed at the unit level for the sole purpose of aircrew training for upgrade or proficiency. Does not include operational missions as defined in this AFI.

Unilateral—Operations confined to a single service.

Visual Contour Flight—Operation at a predetermined altitude above the ground, following contours visually using the radar altimeter to crosscheck altitude. An operating radar altimeter is required.

Visual Reconnaissance—Aerial survey of areas, routes, or LZs.

Zero Fuel Weight—Weight, expressed in pounds, of a loaded aircraft not including wing and body tank fuel. All weight in excess of the maximum zero fuel weight will consist of usable fuel.

ATTACHMENT 2

PILOT EVALUATION CRITERIA

A2.1. General Grading Standards.

- A2.1.1. The grading criteria in this attachment are divided into six sections: Ground Phase, General, Qualification, Instrument, Instructor, and Mission. These areas match the graded areas for pilots found in forms specified in AFMC Supplement to AFI 11-202V2.
- A2.1.2. If published guidance is not sufficient or does not apply, with concurrence from AFMC/A3V, follow lead MAJCOM criteria.

A2.2. Area A: Ground Phase.

A2.2.1. Area A-1: Publications.

- A2.2.1.1. Digital TO's are approved for use by individual aircrew members.
- A2.2.1.2. Q. Assigned flight publications were current, complete, and usable for any of the unit's tasking.
- A2.2.1.3. Q-. Assigned flight publications contained deviations, omissions, and/or errors; however, contained everything necessary to effectively accomplish the mission and did not compromise safety of flight.
- A2.2.1.4. U. Contained major deviations, omissions, and/or errors which compromise safety of flight

A2.2.2. Area A-2: Emergency Procedures Evaluation.

- A2.2.2.1. Q. Displayed correct, immediate response to Bold Face and non-Bold Face emergency situations. Effectively used checklist.
- A2.2.2.2. Q-. Response to Bold Face emergencies 100% correct. Response to certain areas of non-Bold Face emergencies or follow-on steps to Bold Face procedures was slow/confused. Used the checklist when appropriate, but slow to locate required data.
- A2.2.2.3. U. Incorrect response for Bold Face emergency. Unable to analyze problems or take corrective action. Did not use checklist, or lacks acceptable familiarity with its arrangement or contents.

A2.3. Area B: General.

A2.3.1. Area B-1: Safety (Critical).

- A2.3.1.1. Q. Aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment.
- A2.3.1.2. U. Was not aware of or did not comply with all safety factors required for safe operation or mission accomplishment. Did not adequately clear. Operated the aircraft in a dangerous manner.

A2.3.2. Area B-2: Judgement (Critical).

A2.3.2.1. Q. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.

A2.3.2.2. U. Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that safety could have been compromised.

A2.3.3. Area B-3: Flight Discipline (Critical).

- A2.3.3.1. Q. Demonstrated strict professional flight and crew discipline throughout all phases of the mission.
- A2.3.3.2. U. Failed to exhibit strict flight or crew discipline. Violated or ignored rules or instructions.

A2.3.4. Area B-4: Briefings.

- A2.3.4.1. Q. Presented briefing in a professional manner. Briefing was well organized and in a logical sequence. Established objectives for the mission. Effective use of training aids. Concluded briefing in time to allow for element/crew briefing (if applicable) and preflight of personal equipment, aircraft and ordnance. Flight members clearly understood mission requirements. Considered the abilities of all flight members. Briefed corrective action from previous mission and probable problem areas when appropriate.
- A2.3.4.2. Q-. Events out of sequence, hard to follow, some redundancy. Did not make effective use of available training aids. Dwelled on non-essential mission items. Limited discussion of techniques. Did not consider all flight members' abilities. Did not identify probable problem areas.
- A2.3.4.3. U. Confusing presentation. Did not allow time for element/crew briefing (if applicable) and preflight of personal equipment, aircraft and ordnance. Did not use training aids. Redundant throughout briefing. Lost interest of flight members. Presentation created doubts or confusion. Did not establish objectives for the mission. Omitted major training events or did not discuss techniques. Ignored flight members' abilities and past problem areas.

A2.3.5. Area B-5: Personal Equipment.

- A2.3.5.1. Q. Thoroughly familiar with personal equipment requirements, usage, and preflight.
- A2.3.5.2. Q-. Possessed required personal equipment items and was familiar with most of the preflight and usage procedures.
- A2.3.5.3. U. Unfamiliar with required personal equipment preflight and usage.

A2.3.6. Area B-6: Forms, Reports, Logs.

- A2.3.6.1. Q. Completed or supervised completion of all required forms without significant error.
- A2.3.6.2. Q-. Completed or supervised completion of all required forms with some errors or omissions that had to be corrected.
- A2.3.6.3. U. Forms were incomplete, improperly filled out. Data on forms inaccurate detracting from recording the mission data.

A2.3.7. Area B-7: Flight Planning.

- A2.3.7.1. Q. Developed a sound plan to accomplish the mission. Checked all factors applicable to flight in accordance with applicable directives. Aware of alternatives available, if flight cannot be completed as planned. Read and initialed all items in the Flight Crew Information File (FCIF)/Read Files. Prepared at briefing time. Required flight publications are current.
- A2.3.7.2. Q-. Same as above, except minor error(s) or omission(s) that did not detract from mission effectiveness. Demonstrated limited knowledge of performance capabilities or approved operating procedures/rules in some areas.
- A2.3.7.3. U. Made major error(s) or omission(s) that would have prevented a safe or effective mission. Displayed faulty knowledge of operating data or procedures. Did not review or initial Go/No-Go items. Not prepared at briefing time.

A2.3.8. Area B-8: Use of Checklists.

- A2.3.8.1. Q. Used current checklist and accomplished all items in proper sequence with no deviations or omissions.
- A2.3.8.2. Q-. Only minor deviations from checklist procedures were noted.
- A2.3.8.3. U. Failed to use current checklist or deviated from checklist procedures resulting in the mission being compromised.

A2.3.9. Area B-9: Crew Resource Management.

- A2.3.9.1. Q. Coordinated effectively with other crewmembers/mission personnel. Effectively used all crewmembers. Gave clear, concise crew instructions.
- A2.3.9.2. Q-. Coordinated satisfactorily with other crewmembers/mission personnel. Some instructions were not clear and concise.
- A2.3.9.3. U. Failed to coordinate with crewmembers/mission personnel. Did not give clear and concise instructions. Failed to utilize resources causing degradation of the mission or safety of flight.

A2.3.10. Area B-10: Communication Procedures.

- A2.3.10.1. Q. Radio and intra-cockpit communications were concise, accurate and effectively used to direct maneuvers or describe the tactical situation.
- A2.3.10.2. Q-. Minor terminology errors or omissions occurred, but did not significantly detract from situational awareness, mutual support or mission accomplishment. Extraneous comments presented minor distractions.
- A2.3.10.3. U. Radio communications were inadequate or excessive. Inaccurate or confusing terminology significantly detracted from mutual support, situational awareness or mission accomplishment.

A2.3.11. Area B-11: Knowledge of Directives.

- A2.3.11.1. Q. Demonstrated thorough knowledge of applicable directives.
- A2.3.11.2. Q-. Minor errors in knowledge of applicable directives. Demonstrated deficiencies either in depth of knowledge or comprehension.
- A2.3.11.3. U. Demonstrated unsatisfactory knowledge of applicable directives.

A2.3.12. Area B-12: Fuel Conservation

- A2.3.12.1. Q. Possessed a high level of knowledge of all applicable aircraft publications and other governing directives and understood how to apply both to enhance fuel conservation. Successfully applied fuel conservation procedures during mission planning and through-out the mission execution.
- A2.3.12.2. Q-. Possessed some knowledge of applicable aircraft publications and other governing directives and understood how to apply both to enhance fuel conservation. Successfully applied some fuel conservation procedures, but failed to apply fuel conservation procedures during mission planning or during some phases of the mission.
- A2.3.12.3. U. Unaware of fuel conservation procedures. Failed to apply any fuel conservation procedures in any area of the mission.

A2.4. Area C: Qualification (Fixed Wing).

A2.4.1. Area C-1: Performance Data.

- A2.4.1.1. Q. Accurately computed/reviewed all required takeoff and landing data. Ensured all flight members were prepared. Aware of abort considerations, runway condition, weather, impact of weather on mission accomplishment.
- A2.4.1.2. Q. Computed/reviewed required takeoff data with minor omissions or errors which did not detract from mission accomplishment or safety.
- A2.4.1.3. U. Major errors or omissions which compromise safety. Faulty or improper knowledge of performance data.

A2.4.2. Area C-2: Preflight Inspection.

- A2.4.2.1. Q. Established and adhered to station, engine start, taxi and take-off times to assure thorough preflight, check of personal equipment, crew briefing, etc. Accurately determined readiness of aircraft for flight.
- A2.4.2.2. Q-. Minor procedural deviations which did not detract from the overall mission.
- A2.4.2.3. U. Major deviations in procedure which would preclude safe mission accomplishment. Failed to accurately determine readiness of aircraft for flight. Crew errors directly contributed to a late takeoff which degraded the mission or made it non-effective.

A2.4.3. Area C-3: Engine Start.

- A2.4.3.1. Q. Accomplished engine start IAW flight manual procedures and checklists. Used correct hand signals.
- A2.4.3.2. Q-. Accomplished engine start with significant omissions or deviations from flight manual checklist procedures that did not affect safety.
- A2.4.3.3. U. Omitted required procedures. Deviations to flight manual which could potentially damage aircraft or mission equipment.

A2.4.4. Area C-4: Taxi.

- A2.4.4.1. Q. Ensured adequate maneuvering space for aircraft. Satisfactorily used power, steering, rudder, or brakes. Taxi speed was adequate for existing conditions. Displayed satisfactory knowledge of marshaling signals.
- A2.4.4.2. Q-. Taxi speed was erratic. Taxi was safe but over-controlled and rough when turning or using brakes. Deviations or omissions from flight manual procedures that did not affect safety or mission accomplishment.
- A2.4.4.3. U. Taxi speed dangerous to aircraft control or systems. Overused brakes causing hot brakes or tire damage. Intervention required to prevent further damage to aircraft.
- A2.4.5. **Area C-5: Takeoff.** (May be completed on a touch-and –go landing for instructors)
 - A2.4.5.1. Q. Maintained smooth aircraft control throughout takeoff. Performed takeoff IAW flight manual procedures and techniques.
 - A2.4.5.2. Q-. Minor flight manual procedural or technique deviations. Control was rough or erratic.
 - A2.4.5.3. U-. Takeoff potentially dangerous. Exceeded aircraft systems limitations. Raised gear too early/late. Failed to establish proper climb attitude. Over-controlled aircraft resulting in excessive deviations from intended flight path.

A2.4.6. Area C-6: Climb Procedures.

- A2.4.6.1. Q. Climb was IAW the applicable flight manual.
- A2.4.6.2. Q-. Some under or over-control. Flight manual deviations significant but did not affect safety of flight or mission accomplishment.
- A2.4.6.3. U. Failed to comply with flight manual procedures. Major deviation affecting safety and mission accomplishment.

A2.4.7. Area C-7: Traffic Pattern.

- A2.4.7.1. Q. Performed patterns/approaches IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Aircraft control was smooth and positive. Accurately aligned with runway. Maintained proper/briefed airspeed/AOA. Airspeed -5/+10 knots.
- A2.4.7.2. Q-. Performed patterns/approaches with minor deviations to procedures and techniques outlined in the flight manual, operational procedures and local directives. Aircraft control was not consistently smooth, but safe. Alignment with runway varied. Slow to correct to proper/briefed airspeed/AOA/ Airspeed -5/+15 knots.
- A2.4.7.3. U. Approaches not performed IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Erratic aircraft control. Large deviations in runway alignment. Exceeded Q- parameters.

A2.4.8. Area C-8: Full Flap/Partial Flap Landing (Fighter/Attack/Trainer, if applicable).

A2.4.8.1. Applicable to normal VFR approaches. Where runway configuration, arresting cable placement or flight manual limitations require an adjustment to the desired touchdown point, a simulated runway threshold will be identified and the grading criteria

- applied accordingly. For instrument approaches, the examinee should utilize a normal glide slope from either the decision height or from a point where visual acquisition of the runway environment is made.
- A2.4.8.2. Q. Performed landings IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Touchdown Point: 150' to 1000' from the runway threshold (Fighters, Attack, Trainers).
- A2.4.8.3. Q-. Performed landings with minor deviations to procedures and techniques outlined in the flight manual, operational procedures and local directives. Touchdown Point: 0' to 149' or 1001' to 1500' from the runway threshold.
- A2.4.8.4. U. Landing not performed IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Touchdown Point exceeded Q-criteria.
- A2.4.9. **Area C-8: Full Flap/Partial Flap Landing** (Bomber/Tanker/Transport, if applicable).
 - A2.4.9.1. Where runway configuration, arresting cable placement or flight manual limitations require an adjustment to the desired touchdown point, a simulated runway threshold will be identified and the grading criteria applied accordingly. Flight manual or other regulatory guidance that is more restrictive than the criteria detailed below should be used for touchdown point criteria.
 - A2.4.9.2. Q. Performed landings IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Touchdown Point: Not more than 3,000' from the threshold or 1/3 of runway, whichever is less, and within stopping distance for runway available.
 - A2.4.9.3. Q-. Performed landings with minor deviations to procedures and techniques outlined in the flight manual, operational procedures and local directives. Touchdown Point: Outside of Q criteria but within stopping distance for runway available.
 - A2.4.9.4. U. Landing not performed IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Touchdown Point not within stopping distance for runway available.

A2.4.10. Area C-9: No Flap Landing.

- A2.4.10.1. Q. Used sound judgment. Configured at the appropriate position/altitude. Flew final based on recommended procedures, airspeed/AOA and glide path. Smooth, positive control of aircraft. Set parameters for ejection if necessary. Touchdown point was IAW criteria detailed in paragraph A.2.4.8.
- A2.4.10.2. Q-. Safety not compromised. Configured at a position and altitude which allowed for a safe approach. Minor deviations from recommended procedures, airspeed/AOA and altitudes. Unnecessary maneuvering due to minor errors in planning or judgment. Touchdown point was IAW criteria detailed in paragraph A2.4.8
- A2.4.10.3. U. Major deviations from recommended procedures, airspeed/AOA and altitudes. Required excessive maneuvering due to inadequate planning or judgment. Did

- not set parameters for ejection if approach was unsuccessful. Touchdown point was IAW criteria detailed in paragraph A.1.4.8.
- A2.4.11. **Area C-10: Engine Out Pattern/Landing/SFO:** Includes simulated engine out varied flap settings, SFO, as appropriate. In addition to the criteria below, criteria from **A2.4.10** also applies to this area if applicable. **C-130 IP/EP Only**: Grade simulated two-engine out approach, conditions/mission permitting.
 - A2.4.11.1. Q. Complied with all flight manual and operational procedures. Maintained safe maneuvering airspeed/AOA. Flew approach compatible with the situation. Adjusted approach for type emergency simulated.
 - A2.4.11.2. Q-. Minor procedural errors. Erratic airspeed/ AOA control. Errors did not detract from safe handling of the situation.
 - A2.4.11.3. U. Did not comply with applicable procedures. Erratic airspeed/AOA control compounded problems associated with the emergency. Flew an approach which was incompatible with the simulated emergency. Did not adjust approach for simulated emergency.
- A2.4.12. **Area C-11: Engine Out Go-Around** (If applicable).
 - A2.4.12.1. Q. Initiated and performed go-around promptly in accordance with flight manual and operational procedures and directives.
 - A2.4.12.2. Q-. Slow to initiate go-around or procedural steps.
 - A2.4.12.3. U. Did not self-initiate go-around when appropriate or directed. Techniques inappropriate or applied incorrect procedures.
- A2.4.13. **Area C-12: Landing.** (Criteria applies to RCP landings)
 - A2.4.13.1. Full Stop Landing (Required for MP/MC, if profile permits for IP)
 - A2.4.13.1.1. Q. Landing accomplished IAW flight manual procedures. Aircraft control throughout the landing was smooth and positive using proper braking, steering, and flight control inputs. Touched down in the desired touchdown zone with accurate runway alignment.
 - A2.4.13.1.2. Q-. Landing accomplished IAW procedures outlined in the flight manual, operational procedures, and local directives with deviations, omissions, and/or errors, which did not jeopardize safety of flight. Aircraft control to include braking, steering, and flight control inputs was erratic, but safe. Aircraft control was rough however, runway alignment was accomplished and the aircraft touched down within the first 3000' of the runway (or as briefed).
 - A2.4.13.1.3. U. Landing not performed IAW procedures outlined in the flight manual, operational procedures and local directives. Failed to touchdown within the first 3000' of the runway (or as briefed). Excessive deviations in runway alignment. Airspeed, alignment, or sink rate limitations exceeded. Landing unsafe, inappropriate control inputs jeopardized safety.
 - A2.4.13.2. Touch and Go Landing (Required for T/GO certified MP and all IP)

- A2.4.13.2.1. Q. Landing accomplished IAW flight manual, operational procedures, and local directives. Aircraft control was smooth and positive. Touched down in the desired touchdown zone with accurate runway alignment.
- A2.4.13.2.2. Q-. Landing accomplished IAW procedures outlined in the flight manual, operational procedures, and local directives with deviations, omissions, and/or errors, which did not jeopardize safety of flight. Aircraft control/ flight control inputs was erratic, but safe. Aircraft control was rough however, runway alignment was accomplished and the aircraft touched down within the first 3000' of the runway (or as briefed).
- A2.4.13.2.3. U. Landing not performed IAW procedures outlined in the flight manual, operational procedures and local directives. Failed to touchdown within the first 3000' of the runway (or as briefed). Excessive deviations in runway alignment. Airspeed, alignment, or sink rate limitations exceeded. Landing unsafe, inappropriate control inputs jeopardized safety.
- A2.4.13.3. U. Airspeed, alignment, or sink rate limitations exceeded. Landing unsafe, inappropriate control inputs jeopardized safety.

A2.4.14. Area C-13: After Landing.

- A2.4.14.1. Q. Appropriate after landing checks and aircraft taxi procedures were accomplished.
- A2.4.14.2. Q-. Significant deviations or omissions from established procedures but safety and mission effectiveness were not affected.
- A2.4.14.3. U. Checks were not accomplished in timely manner. Errors of omission committed without correction.

A2.4.15. Area C-14: Systems Knowledge.

- A2.4.15.1. Q. Thorough knowledge of aircraft systems, limitations, and performance characteristics.
- A2.4.15.2. Q-. Knowledge of aircraft systems, limitation, and performance characteristics sufficient to perform the mission safely. Deficiencies either in depth of knowledge or comprehension.
- A2.4.15.3. U. Unfamiliar with systems operation. Unable to recall details, ops limits, or operational processes.

A2.4.16. Area C-15: National Airspace System (NAS) Rules and Procedures.

- A2.4.16.1. Q. Complied with NAS rules/requirements and airspeed restrictions or potential traffic conflicts within NAS. When descending VFR took appropriate precautions to avoid traffic conflicts.
- A2.4.16.2. Q-. Same as above but minor deviations detracted from safe accomplishment of the mission.
- A2.4.16.3. U. Unfamiliar with NAS rules and procedures. Unaware of potential traffic conflicts. Did not use appropriate risk mitigating tools such as flight following during VFR operations in high traffic areas.

A2.4.17. **ADDITIONAL EMERGENCY PATTERN WORK GRADING CRITERIA** This section is to be used in conjunction with aircraft specific criteria for emergency pattern not found elsewhere within this document. Reference applicable flight manual, operational procedures and local directives for the applicable emergency pattern to be evaluated.

- A2.4.17.1. **Q**. Maintained smooth aircraft control throughout the maneuver. Performed pattern/approach IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Accurately aligned with runway. Maintained proper/briefed airspeed/AOA. Touchdown point within the desired / briefed touchdown zone.
- A2.4.17.2. **Q-**. Performed pattern/approach with minor deviations to procedures and techniques outlined in the flight manual, operational procedures and local directives, but safe. Control was rough or erratic. Alignment with runway varied. Slow to correct to proper/briefed airspeed/AOA. Touchdown point safe but not within the designated / briefed touchdown zone.
- A2.4.17.3. U. Potentially dangerous. Pattern/approach not performed IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Over-controlled aircraft resulting in excessive deviations from intended flight path. Large deviations in runway alignment. Unable to complete maneuver.

A2.5. Section C: Qualification (Helicopter Pilot).

A2.5.1. Area C-1: Performance Data.

- A2.5.1.1. Q. Accurately computed/reviewed all required takeoff and landing data. Ensured all flight members were prepared. Individual was aware of abort considerations, landing zone condition, weather, impact of weather on mission accomplishment.
- A2.5.1.2. Q-. Computed/reviewed required takeoff data with minor omissions or errors, which did not detract from mission accomplishment or safety.
- A2.5.1.3. U. Major errors or omissions which compromise safety. Individual demonstrated faulty or improper knowledge of performance data.

A2.5.2. Area C-2: Preflight Inspection.

- A2.5.2.1. Q. Established and adhered to station, engine start, taxi and take-off times to assure thorough preflight, check of personal equipment, crew briefing, etc. Accurately determined readiness of aircraft for flight.
- A2.5.2.2. Q-. Minor procedural deviations, which did not detract from the overall mission.
- A2.5.2.3. U. Individual committed major deviations in procedure which would preclude safe mission accomplishment. Failed to accurately determine readiness of aircraft for flight. Crew errors directly contributed to a late takeoff, which degraded the mission or made it non-effective.

A2.5.3. Area C-3: Engine Start.

A2.5.3.1. Q. Accomplished engine start IAW flight manual procedures and checklists. Used correct hand signals.

- A2.5.3.2. Q-. Accomplished engine start with significant omissions or deviations from flight manual checklist procedures that did not affect safety.
- A2.5.3.3. U. Omitted required procedures. Individual committed deviations to flight manual, which could potentially damage aircraft or mission equipment.

A2.5.4. Area C-4: Taxi.

- A2.5.4.1. Q. Ensured adequate maneuvering space for aircraft. Satisfactorily used power, cyclic steering, pedals, or brakes. Taxi speed was adequate for existing conditions. Displayed satisfactory knowledge of marshaling signals.
- A2.5.4.2. Q-. Taxi speed was erratic. Taxi was safe but over-controlled and rough when turning or using brakes. Deviations or omissions from flight manual procedures that did not affect safety or mission accomplishment.
- A2.5.4.3. U. Taxi speed dangerous to aircraft control or systems. Overused brakes causing hot brakes or tire damage. Intervention required to prevent further damage to aircraft.

A2.5.5. Area C-5: Takeoff.

- A2.5.5.1. Q. Maintained smooth aircraft control throughout takeoff. Performed takeoff IAW flight manual procedures and techniques.
- A2.5.5.2. Q-. Minor flight manual procedural or technique deviations. Control was rough or erratic.
- A2.5.5.3. U-. Individual performed a potentially dangerous takeoff. Exceeded aircraft systems limitations. Raised gear too early/late. Failed to establish proper climb attitude. Over-controlled aircraft resulting in excessive deviations from intended flight path.

A2.5.6. Area C-6: Climb Procedures.

- A2.5.6.1. Q. Climb was IAW the applicable flight manual.
- A2.5.6.2. Q-. Some under or over-control. Flight manual deviations significant but did not affect safety of flight or mission accomplishment.
- A2.5.6.3. U. Failed to comply with flight manual procedures. Major deviation affecting safety and mission accomplishment.

A2.5.7. Area C-7: Traffic Pattern.

- A2.5.7.1. Q. Performed patterns/approaches IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Aircraft control was smooth and positive. Accurately aligned with runway. Maintained proper/briefed airspeed/approach angle. Airspeed +/-10 knots. Altitude +/- 50 feet.
- A2.5.7.2. Q-. Performed patterns/approaches with minor deviations to procedures and techniques outlined in the flight manual, operational procedures and local directives. Aircraft control was not consistently smooth, but safe. Alignment with runway varied. Slow to correct to proper/briefed airspeed/approach angle. Airspeed +/-20 knots. Altitude +/- 100 feet.

A2.5.7.3. U. Approaches not performed IAW procedures and techniques outlined in the flight manual, operational procedures and local directives. Erratic aircraft control. Individual committed large deviations in runway alignment. Exceeded Q- parameters.

A2.5.8. Area C-8: Hovering Maneuvers.

- A2.5.8.1. Q. Examinee demonstrated precise, smooth control while following all procedures and directives. Accurately anticipates wind correction requirements and applies accordingly.
- A2.5.8.2. Q-. Hovering altitude, speed, and direction erratic. Was safe, but over-controlled and/or rough.
- A2.5.8.3. U. Unable to maintain altitude, speed, or direction. Control inputs inappropriate for wind conditions. Unsafe control inputs caused major deviations.

A2.5.9. Area C-9: Autorotation – Straight-In.

- A2.5.9.1. Q. Smooth, positive control of airspeed and rotor RPM throughout the maneuver. Flare and recovery were precise, allowing for a smooth power-on recovery IAW flight manual procedure.
- A2.5.9.2. Q-. Minor deviation from flight manual procedures, but did not compromise safety of flight. Slow in recognizing and controlling airspeed, rotor RPM, and throttle inputs.
- A2.5.9.3. U. Major deviations from flight manual procedures. Rough, imprecise control caused unsafe airspeed, altitude, and rotor RPM deviations.

A2.5.10. Area C-10: Autorotation – Turning.

- A2.5.10.1. Q. Smooth, positive control of airspeed and rotor RPM throughout the maneuver. Flare and recovery were precise, allowing for a smooth power-on recovery IAW flight manual procedure.
- A2.5.10.2. Q-. Minor deviation from flight manual procedures, but did not compromise safety of flight. Slow in recognizing and controlling airspeed, rotor RPM, and throttle inputs.
- A2.5.10.3. U. Major deviations from flight manual procedures. Rough, imprecise control caused unsafe airspeed, altitude, and rotor RPM deviations.

A2.5.11. Area C-11: Approach/Landing.

- A2.5.11.1. Q. Approach flown IAW flight manual procedures. Aircraft control was positive, alignment with the intended touchdown area was maintained. Airspeed and altitude maintained +/- 10 KIAS, +/- 50 feet. Conducted level turn to final. Cleared the aircraft.
- A2.5.11.2. Q-. Approach and/or aircraft control rough and erratic. Deviations to flight manual guidelines significant but did not affect safety or mission accomplishment. Airspeed and altitude maintained +/- 20 KIAS, +/- 100 feet.

A2.5.11.3. U. Approaches procedurally unsafe. Major airspeed, heading, and altitude deviations resulting in failure to accomplish a safe landing. Did not clear the aircraft. Exceeded Q- criteria.

A2.5.12. Area C-12: Remote Ops/Site Evaluation.

- A2.5.12.1. Q. Familiar with procedures and able to execute appropriate maneuvers IAW the flight manual. Examinee was thoroughly aware of power requirements and limitations. Effectively assessed landing risk. Evaluated and communicated landing area obstacles, size, and topography, winds and turbulence.
- A2.5.12.2. Q-. Missed minor factors pertinent to the approach. Evaluation not tailored to the situation or excessively detailed and time consuming. Confused or disorganized communication with crew.
- A2.5.12.3. U. Major deviations from Q criteria. Errors or omissions precluded safe and effective maneuvers/effectiveness. Failed to consider pertinent details. Examinee was unable to clearly communicate with crew.

A2.5.13. Area C-13: After Landing.

- A2.5.13.1. Q. Appropriate after landing checks and aircraft taxi procedures were accomplished.
- A2.5.13.2. Q-. Significant deviations or omissions from established procedures but safety and mission effectiveness were not affected.
- A2.5.13.3. U. Checks were not accomplished in timely manner. Errors of omission committed without correction.

A2.5.14. Area C-14: Systems Knowledge.

- A2.5.14.1. Q. Examinee possessed a thorough knowledge of aircraft systems, limitations, and performance characteristics.
- A2.5.14.2. Q-. Examinee possessed knowledge of aircraft systems, limitation, and performance characteristics sufficient to perform the mission safely. Deficiencies either in depth of knowledge or comprehension.
- A2.5.14.3. U. Examinee was unfamiliar with systems operation. Unable to recall details, ops limits, or operational processes.

A2.5.15. Area C-15: Boldface Emergencies.

- A2.5.15.1. Q. Properly analyzed the situation without undue delay and demonstrated adequate knowledge of procedures to effectively handle the emergency. Boldface/Critical Action Procedures (CAPs) required by applicable flight manuals were accomplished without omission and in the proper sequence. Unnecessary procedures did not preclude satisfactory control of the emergency or further complicate the situation. Effective and timely use made of other crewmembers, the flight manual, and checklist. Positive control of the aircraft existed at all times.
- A2.5.15.2. U. Examinee committed incorrect response(s) to Boldface/CAPs. Unable to analyze problems or take corrective action. Did not use checklist, flight manual, or other

crewmembers even though it was a procedural requirement. Did not maintain positive control of the aircraft at all times.

A2.5.16. Area C-16: Non-Critical Emergencies.

- A2.5.16.1. Q. Demonstrated satisfactory knowledge of non-critical emergency procedures. Properly analyzed the situation and demonstrated or explained the appropriate procedures as outlined in the flight manual. Examinee was thoroughly familiar with flight manual and checklist arrangement and contents.
- A2.5.16.2. Q-. Examinee response to presented situation was slow or confused. Slow to use checklist, flight manual, and other crewmembers when appropriate. Slow to locate required data in checklist or flight manual.
- A2.5.16.3. U. Unable to analyze the problem and formulate a solution. Examinee was unfamiliar with checklists and flight manual data. Failed to utilize crewmembers when appropriate.

A2.5.17. Area C-17: NAS Rules and Procedures.

- A2.5.17.1. Q. Complied with NAS rules/requirements and airspeed restrictions or potential traffic conflicts within NAS. When descending VFR took appropriate precautions to avoid traffic conflicts.
- A2.5.17.2. Q-. Same as above but minor deviations detracted from safe accomplishment of the mission.
- A2.5.17.3. U. Unfamiliar with NAS rules and procedures. Unaware of potential traffic conflicts. Did not use appropriate risk mitigating tools such as flight following during VFR operations in high traffic areas.

A2.6. Section D: Instrument.

A2.6.1. Area D-1: Instrument Takeoff.

- A2.6.1.1. Q. Maintained smooth aircraft control throughout takeoff. Performed takeoff IAW flight manual procedures and AFMAN 11-217.
- A2.6.1.2. Q-. Minor procedural deviations. Control was rough or erratic.
- A2.6.1.3. U-. Examinee executed a potentially dangerous takeoff. Exceeded aircraft systems limitations. Raised gear too early/late. Failed to establish proper climb attitude. Over controlled aircraft resulting in excessive deviations from intended flight path.

A2.6.2. Area D-2: Instrument Departure.

- A2.6.2.1. Q. Performed departure as published/directed and complied with all restrictions.
- A2.6.2.2. Q-. Minor deviations in airspeed and navigation occurred during completion of departure.
- A2.6.2.3. U. Failed to comply with published/directed departure instructions.

A2.6.3. Area D-3: Climb/Level off.

- A2.6.3.1. Q. Climb IAW flight manual. Accomplished required checks. Leveled off smoothly. Promptly established proper cruise airspeed.
- A2.6.3.2. Q-. Climb airspeed deviations. Level-off was erratic. Slow in establishing proper cruise airspeed.
- A2.6.3.3. U. Level-off was grossly erratic. Exceeded Q- limits. Excessive delay or failed to establish proper cruise airspeed. Failed to reset altimeter, as required.

A2.6.4. Area D-4: Unusual Attitudes (May be evaluated during EPE).

- A2.6.4.1. Q. Smooth, positive recovery to level flight with correct recovery procedures.
- A2.6.4.2. Q-. Slow to analyze attitude, or erratic in recovery to level flight. Correct recovery procedures used.
- A2.6.4.3. U. Unable to determine attitude. Improper recovery procedures were used.

A2.6.5. Area D-5: Holding.

- A2.6.5.1. Q. Examinee entered Holding and used procedures IAW applicable directives. Made appropriate wind drift and timing adjustments. Leg timing +/- 15 seconds, TACAN +/- 2 nm.
- A2.6.5.2. Q-. Examinee had difficulty in entering the holding pattern and/or establishing correct inbound leg time. Inadequate wind drift correction prevented expeditious inbound course interception; course intercepted prior to holding fix. Leg timing +/- 20 seconds, TACAN +/- 3 nm.
- A2.6.5.3. U. Unable to determine direction of turn or timing criteria. Disoriented; unable to intercept inbound course prior to holding fix. Exceeded Q- timing and TACAN criteria.

A2.6.6. Area D-6: Descent/Arrival:

- A2.6.6.1. Q. Performed descent as directed, complied with all restrictions. Planned ahead for altitude restrictions.
- A2.6.6.2. Q-. Performed descent as directed with minor deviations. Difficulty achieving altitude restrictions. Slow to respond to controller instructions.
- A2.6.6.3. U. Examinee performed descent with major deviations. Ignored controller instructions. Violated altitude restrictions.

A2.6.7. Area D-7: Instrument Traffic Pattern.

- A2.6.7.1. Q. Performed procedures as published or directed and IAW flight manual. Examinee executed smooth and timely response to controller instruction.
- A2.6.7.2. Q-. Examinee performed procedures with minor deviations. Slow to respond to controller instruction.
- A2.6.7.3. U. Examinee performed procedures with major deviations/ erratic corrections. Failed to comply with controller instruction.

A2.6.8. Area D-8: Precision Approach (ILS/MLS/RNAV(LPV))

- A2.6.8.1. Q. Examinee performed procedures as published and IAW applicable flight manual. Smooth and timely corrections to azimuth and glide slope. Complied with decision height and position would have permitted a safe landing. Maintained proper/briefed AOA. Approach was within the following parameters:
 - A2.6.8.1.1. Airspeed +10/-5 kts. (N/A Helicopters; use general airspeed criteria)
 - A2.6.8.1.2. Glide Slope/Azimuth within one dot.
 - A2.6.8.1.3. Initiated missed approach (if applicable) at decision height, +50/-0 ft.
- A2.6.8.2. Q-. Examinee performed procedures with minor deviations. Slow to make corrections or initiate procedures. Position would have permitted a safe landing. Slow to correct to proper/briefed AOA. Approach exceeded Q parameters but was within the following parameters:
 - A2.6.8.2.1. Airspeed +15/-5 kts. (N/A Helicopters; use general airspeed criteria)
 - A2.6.8.2.2. Glide Slope within one dot low/two dots high.
 - A2.6.8.2.3. Azimuth within two dots.
 - A2.6.8.2.4. Initiated missed approach (if applicable) at decision height, +100/-0 ft.
- A2.6.8.3. U. Examinee performed procedures with major deviations. Examinee made erratic corrections. Exceeded Q- limits. Did not comply with decision height or position at Decision Height (DH) would not have permitted a safe landing.

A2.6.9. Area D-9: Precision Approach (PAR).

- A2.6.9.1. Q. Examinee performed procedures as directed and IAW applicable flight manual. Examinee performed smooth and timely responses to controller instruction. Complied with decision height. Position would have permitted a safe landing. Maintained proper/briefed AOA. Maintained glide path with only minor deviations. Approach was flown within the following parameters:
 - A2.6.9.1.1. Airspeed +10/-5 kts. (N/A Helicopters; use general airspeed criteria)
 - A2.6.9.1.2. Heading within 5 degrees of controller instruction.
 - A2.6.9.1.3. Initiated missed approach (if applicable) at decision height, +50/-0 ft.
- A2.6.9.2. Q-. Examinee performed procedures with minor deviations. Slow to respond to controller's instructions. Position would have permitted a safe landing. Slow to correct to proper/ briefed AOA. Improper glide path control. Approach was flown outside of Q standards but within the following parameters:
 - A2.6.9.2.1. Airspeed N/A Helicopters; use general airspeed criteria
 - A2.6.9.2.2. Heading within 10 degrees of controller instruction.
 - A2.6.9.2.3. Initiated missed approach (if applicable) at decision height, +100/-0 ft.
- A2.6.9.3. U. Examinee performed procedures with major deviations. Examinee made erratic corrections. Did not respond to controller instruction. Exceeded Q- limits. Did not comply with decision height and/or position would not have permitted a safe landing. Erratic glide path control.

A2.6.10. Area D-10: Non-Precision Approach.

- A2.6.10.1. Q. Examinee adhered to all published/directed procedures and restrictions. Used appropriate descent rate to arrive at Minimum Descent Altitude (MDA) at or before Visual Descent Point (VDP)/ Missed Approach Point (MAP). Position would have permitted a safe landing. Maintained proper/briefed AOA. Approach was flown within the following parameters:
 - A2.6.10.1.1. Airspeed +10/-5 kts. (N/A Helicopters; use general airspeed criteria)
 - A2.6.10.1.2. Heading +5 degrees (ASR).
 - A2.6.10.1.3. Course +5 degrees at MAP.
 - A2.6.10.1.4. Localizer course guidance less than one dot deflection.
 - A2.6.10.1.5. Minimum Descent Altitude +100/-0 feet.
- A2.6.10.2. Q-. Examinee performed approach with minor deviations. Arrived at MDA at or before the MAP, but past the VDP. Position would have permitted a safe landing. Slow to correct to proper/ briefed AOA. Approach was flown outside of Q parameters, but within the following parameters:
 - A2.6.10.2.1. Airspeed +15/-5 kts. (N/A Helicopters; use general airspeed criteria)
 - A2.6.10.2.2. Heading +10 degrees (ASR).
 - A2.6.10.2.3. Course +10 degrees at MAP.
 - A2.6.10.2.4. Localizer course guidance within two dots deflection.
 - A2.6.10.2.5. Minimum Descent Altitude +150/-50 feet.
- A2.6.10.3. U. Examinee did not comply with published/directed procedures or restrictions. Exceeded Q- limits. Maintained steady-state flight below the MDA, even though the -50 foot limit was not exceeded. Could not land safely from the approach. **NOTE:** The -50 foot tolerance applies only to momentary excursions.

A2.6.11. **Area D-11: Circling**

- A2.6.11.1. Q. Examinee executed circling approach as published/directed. Completed all procedures IAW applicable flight manual.
- A2.6.11.2. Q-. Examine executed circling approach with minor deviations. Slow to comply with published procedures, controller's instructions or flight manual procedures.
- A2.6.11.3. U. Examinee executed circling approach with major deviations or did not comply with applicable directives.

A2.6.12. Area D-12: Missed Approach/Climb Out.

- A2.6.12.1. Q. Examinee executed missed-approach/climb-out as published/directed. Completed all procedures IAW applicable flight manual.
- A2.6.12.2. Q-. Examinee executed missed approach/climb-out with minor deviations. Slow to comply with published procedures, controller's instructions or flight manual procedures.

A2.6.12.3. U. Examinee executed missed-approach/climb-out with major deviations, or did not comply with applicable directives.

A2.7. Section E: Instructor.

A2.7.1. Area E-1: Instructional Ability.

- A2.7.1.1. Q. Examinee demonstrated excellent instructor/evaluator ability. Clearly defined all mission requirements and any required additional training/corrective action. Instruction/evaluation was accurate, effective and timely. Was completely aware of aircraft/mission situation at all times.
- A2.7.1.2. Q-. Examinee had problems with communication or analysis which degraded effectiveness of instruction/evaluation.
- A2.7.1.3. U. Examinee demonstrated inadequate ability to instruct/evaluate. Unable to perform, teach or assess techniques, procedures, systems use or tactics. Did not remain aware of aircraft/mission situation at all times.

A2.7.2. Area E-2: Briefing/Debriefing.

- A2.7.2.1. Q. Examinee conducted a well-organized briefing and debriefing which analyzed mission requirements, identified significant discrepancies and presented the correct procedure. Adequately briefed and instructed the student on specific mission requirements. Did not overwhelm the upgrading aircrew with a long and detailed discussion of minor discrepancies.
- A2.7.2.2. Q-. Examinee conducted an acceptable debriefing. Omitted some items that were important to completing the student's mission. Analyzed most significant discrepancies and presented the correct procedures with minor deviations or omissions.
- A2.7.2.3. U. Examinee failed to instruct required mission items. Examinee was unable to analyze deviations and present corrections. Did not notice or debrief major deviations. Mission non-effective for planning and instruction reasons.
- A2.7.3. **Area E-3: Demonstration and Performance.** For instructor evaluations where the IP normally instructs from a chase aircraft, the examinee will fly a portion of the mission in the chase position.
 - A2.7.3.1. Q. Examinee performed required maneuvers within prescribed parameters. Provided concise, meaningful in-flight commentary. Demonstrated excellent instructor proficiency.
 - A2.7.3.2. Q-. Examinee performed required maneuvers with minor deviations from prescribed parameters. In-flight commentary was sometimes unclear.
 - A2.7.3.3. U. Examinee was unable to properly perform required maneuvers. Made major procedural errors. Did not provide in-flight commentary. Demonstrated below-average instructor proficiency.

A2.7.4. Area E-4: Conduct of the Mission.

A2.7.4.1. Q. Examinee executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.

- A2.7.4.2. Q-. Examinee made untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not effectively used to the extent specific mission objectives were not achieved.
- A2.7.4.3. U. Examinee's unacceptable or unsafe decisions compromised safety. Undisciplined actions violated training rules repeatedly.

A2.7.5. Area E-5: Touch and Go Landings (Fixed Wing).

- A2.7.5.1. Q. Examinee demonstrated thorough knowledge of safety emergency contingencies during touch and go landings. Performed maneuver IAW established procedures accomplishing all checklist items in a timely manner.
- A2.7.5.2. Q-. Examinee made minor deviations or omissions from established procedures but safety and mission accomplishment not affected. Limited knowledge of safety/emergency contingencies during touch and go landings.
- A2.7.5.3. U. Examinee improperly configured the aircraft for landing or procedures compromised safety. Examinee was unprepared for contingencies.

A2.8. Section F: Mission.

A2.8.1. Area F-1: Knowledge.

- A2.8.1.1. Q. Examinee was fully knowledgeable in mission requirements, test plan directives, aircraft limitations, and partial flight manual. Examinee effectively coordinated with other crew members and project personnel.
- A2.8.1.2. Q-. Examinee demonstrated a limited knowledge of mission requirements, test plan directives, aircraft limitations, or the partial flight manual which degraded a portion of the mission objective or CRM.
- A2.8.1.3. U. Examinee had inadequate knowledge of mission requirements, test plan directive, aircraft limitations, and partial flight manual. Did not effectively use resources. Directly affected successful mission accomplishment.

A2.8.2. Area F-2: Planning.

- A2.8.2.1. Q. Examinee considered all factors necessary for mission accomplishment to include weather, mission profile, airspace utilization/restrictions, and proper documentation.
- A2.8.2.2. Q-. Examinee made limited consideration of all factors necessary for mission accomplishment. However, did not affect mission objective directly, but may have contributed toward lack of effective CRM.
- A2.8.2.3. U. Examinee did not consider all factors necessary for mission accomplishment. Lack of consideration contributed negatively towards successful mission completion.

A2.8.3. Area F-3: Execution.

A2.8.3.1. Q. Examinee accomplished major mission objectives in a timely and skillful manner.

- A2.8.3.2. Q-. Examinee committed errors or omission, which did not render mission ineffective, but indicated a definite need for additional training.
- A2.8.3.3. U. Examinee's improper execution of duties negatively impacted mission accomplishment.

A2.8.4. Area F-4: Security (Critical).

- A2.8.4.1. Q. Examinee maintained adequate security of mission information and material throughout preflight, flight, and post flight.
- A2.8.4.2. U. Examinee used inadequate security procedures, which would lead to the compromise of mission information and/or material.

ATTACHMENT 3

WSO/NAVIGATOR/OSO/EWO/DSO EVALUATION CRITERIA

A3.1. General Grading Standards.

- A3.1.1. The grading criteria in this attachment are divided into five sections: Ground Phase, General, Qualification, Instructor, and Mission. Use all sections for criteria applicable to the events performed on the evaluation. These areas match the graded areas for WSO/Navigator/CSO/OSO/EWO/DSOs found on forms specified in AFMC Supplement to AFI 11-202V2
- A3.1.2. Evaluate events in Area C with respect to aircraft equipment and normal duties as it pertains to the applicable crew position.

A3.2. Section A: Ground Phase.

A3.2.1. Area A-1: Publications.

- A3.2.1.1. Digital TO's are approved for use by individual aircrew members.
- A3.2.1.2. Q. Assigned flight publications were current, complete, and usable for any of the unit's tasking.
- A3.2.1.3. Q-. Assigned flight publications contained deviations, omissions, and/or errors; however, contained everything necessary to effectively accomplish the mission and did not compromise safety of flight.
- A3.2.1.4. U. Contained major deviations, omissions, and/or errors which compromise safety of flight.

A3.2.2. Area A-2: Emergency Procedures Evaluation.

- A3.2.2.1. Q. Displayed correct, immediate response to Bold Face and non-Bold Face emergency situations. Effectively used checklist.
- A3.2.2.2. Q-. Response to Bold Face emergencies 100% correct. Response to certain areas of non-Bold Face emergencies or follow-on steps to Bold Face procedures was slow/confused. Used the checklist when appropriate, but slow to locate required data.
- A3.2.2.3. U. Incorrect response for Bold Face emergency. Unable to analyze problems or take corrective action. Did not use checklist, or lacks acceptable familiarity with its arrangement or contents.

A3.3. Section B: General.

A3.3.1. Area B-1: Safety (Critical):

- A3.3.1.1. Q. Aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment.
- A3.3.1.2. U. Was not aware of or did not comply with all safety factors required for safe operation or mission accomplishment. Did not adequately clear. Operated aircraft equipment in a dangerous manner.

A3.3.2. Area B-2: Judgement (Critical):

- A3.3.2.1. Q. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.
- A3.3.2.2. U. Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that safety could have been compromised.

A3.3.3. Area B-3: Flight Discipline (Critical).

- A3.3.3.1. Q. Demonstrated strict professional flight and crew discipline throughout all phases of the mission.
- A3.3.3.2. U. Failed to exhibit strict flight or crew discipline. Violated or ignored rules or instructions.

A3.3.4. Area B-4: Briefings.

- A3.3.4.1. Q. Well organized and presented in a logical sequence. Concluded briefing in time to allow for element/crew briefing (if applicable) and preflight of personal equipment, aircraft and ordnance. Presented briefing in a professional manner. Effective use of training/visual aids. Flight members clearly understood mission requirements. Established objectives for the mission. Presented all training events and effective technique discussion for accomplishing the mission. Considered the abilities of all flight members. Briefed corrective action from previous mission and probable problem areas when appropriate.
- A3.3.4.2. Q-. Events out of sequence, hard to follow, some redundancy. Did not make effective use of available training/visual aids. Dwelled on non-essential mission items. Omitted some minor training events. Limited discussion of techniques. Did not consider all flight members' abilities. Did not identify probable problem areas.
- A3.3.4.3. U. Confusing presentation. Did not allow time for element/crew briefing (if applicable) and preflight of personal equipment, aircraft and ordnance. Did not use training aids. Redundant throughout briefing. Lost interest of flight members. Presentation created doubts or confusion. Did not establish objectives for the mission. Omitted major training events or did not discuss techniques. Ignored flight members' abilities and past problem areas.

A3.3.5. Area B-5: Personal Equipment.

- A3.3.5.1. Q. Thoroughly familiar with personal equipment requirements, usage, and preflight.
- A3.3.5.2. Q-. Possessed required personal equipment items and was familiar with most of the preflight and usage procedures.
- A3.3.5.3. U. Unfamiliar with required personal equipment preflight and usage.

A3.3.6. Area B-6: Forms, Reports, Logs.

- A3.3.6.1. Q. Completed or supervised completion of all required preflight and post flight forms and documentation without significant error.
- A3.3.6.2. Q-. Completed or supervised completion of all required preflight and post flight forms and documentation with some errors or omissions that had to be corrected.

A3.3.6.3. U. Forms were incomplete, improperly filled out. Data on forms inaccurate detracting from recording the mission data.

A3.3.7. Area B-7: Flight Planning.

- A3.3.7.1. Q. Developed a sound plan to accomplish the mission. Checked all factors applicable to flight in accordance with applicable directives. Had thorough understanding of computerized mission planning software and was able to produce accurate, complete mission materials. Considered NAS rules and requirements such as VFR/IFR and IFR/VFR transition, airspeed restrictions and potential traffic conflicts. Developed contingencies to mitigate potential risks. Produced an effective alternate mission if available, when primary mission cannot be completed as planned. Read and initialed for all items in the Flight Crew Information File (FCIF)/Read Files. Prepared at briefing time.
- A3.3.7.2. Q-. Same as above, except minor error(s) or omission(s) that did not detract from mission effectiveness. Demonstrated limited knowledge of performance capabilities or approved operating procedures/ rules in some areas.
- A3.3.7.3. U. Made major error(s) or omission(s) that would have prevented a safe or effective mission. Displayed faulty knowledge of operating data or procedures. Did not review or initial Go/No-Go items. Not prepared at briefing time.

A3.3.8. Area B-8: Use of Checklists.

- A3.3.8.1. Q. Used current checklist and accomplished all items in proper sequence with no deviations or omissions.
- A3.3.8.2. Q-. Only minor deviations from checklist procedures were noted.
- A3.3.8.3. U. Failed to use current checklist or deviated from checklist procedures resulting in the mission being compromised.

A3.3.9. Area B-9: Crew Resource Management.

- A3.3.9.1. Q. Coordinated effectively with other crewmembers/mission personnel. Effectively used all crewmembers. Gave clear, concise crew instructions.
- A3.3.9.2. Q-. Coordinated satisfactorily with other crewmembers/mission personnel. Some instructions were not clear and concise.
- A3.3.9.3. U. Failed to coordinate with crewmembers/mission personnel. Did not give clear and concise instructions. Failed to utilize resources causing degradation of the mission.

A3.3.10. Area B-10: Communication Procedures.

- A3.3.10.1. Q. Radio and intra-cockpit communications were concise, accurate and effectively used to direct maneuvers or describe the tactical situation.
- A3.3.10.2. Q- Minor terminology errors or omissions occurred, but did not significantly detract from situational awareness, mutual support or mission accomplishment. Extraneous comments over primary or secondary radios presented minor distractions.

A3.3.10.3. U. Radio communications over primary/secondary radios were inadequate or excessive. Inaccurate or confusing terminology significantly detracted from mutual support, situational awareness or mission accomplishment.

A3.3.11. Area B-11: Knowledge of Directives.

- A3.3.11.1. Q. Demonstrated thorough knowledge of applicable directives.
- A3.3.11.2. Q-. Minor errors in knowledge of applicable directives. Demonstrated deficiencies either in depth of knowledge or comprehension.
- A3.3.11.3. U. Demonstrated unsatisfactory knowledge of applicable directives.

A3.3.12. Area B-12: Fuel Conservation

- A3.3.12.1. Q. Possessed a high level of knowledge of all applicable aircraft publications and other governing directives and understood how to apply both to enhance fuel conservation. Successfully applied fuel conservation procedures during mission planning and through-out the mission execution.
- A3.3.12.2. Q-. Possessed some knowledge of applicable aircraft publications and other governing directives and understood how to apply both to enhance fuel conservation. Successfully applied some fuel conservation procedures, but failed to apply fuel conservation procedures during mission planning or during some phases of the mission.
- A3.3.12.3. U. Unaware of fuel conservation procedures. Failed to apply any fuel conservation procedures in any area of the mission.

A3.4. Section C: Qualification.

A3.4.1. Area C-1: Pre-takeoff, Departure, Level Off (WSO/NAV/OSO).

- A3.4.1.1. Q. Completed checklist items in accordance with applicable flight manual. Accurately copied clearance and understood ATC instructions. Ensured compliance with NAS rules and procedures. Monitored aircraft position throughout departure and provided headings and ETAs as required. Ensured safe terrain clearance. Accomplished calibration checks and position fixing/system updates as required for the mission or by the evaluator.
- A3.4.1.2. Q-. Same as above, except made minor error(s) or omissions(s) that did not detract from safety or mission accomplishment.
- A3.4.1.3. U. Major error(s) or omission(s) that would preclude safe/effective mission accomplishment.

A3.4.2. Area C-1: Pre-takeoff, Departure, Level Off (WSO/NAV/CSO/OSO).

- A3.4.2.1. Q. Adhered to station, start, engine, taxi, and takeoff times to assure thorough preflight, check of personal equipment, crew briefing, etc. Performed all checks and procedures through level-off in accordance with approved checklists and applicable directives.
- A3.4.2.2. Q-. Same as above, except procedural deviations which did not detract from mission effectiveness.

A3.4.2.3. U. Omitted major item(s) of the appropriate checklist. Major deviations in procedures which would preclude safe mission accomplishment. Errors directly contributed to mission degradation or made it ineffective.

A3.4.3. Area C-2: Navigation (WSO).

- A3.4.3.1. Q. Demonstrated satisfactory capability to navigate using all available means. Used appropriate navigation procedures. Complied with clearance instructions. Aware of position at all times. Remained within the confines of assigned airspace. Notified pilot of airspeed restrictions or potential traffic conflicts within NAS.
- A3.4.3.2. Q-. Minor errors in procedures/use of navigation equipment. Some deviations in tuning, identifying, and monitoring NAVAIDs. Slow to comply with clearance instructions. Had some difficulty in establishing exact position and course.
- A3.4.3.3. U. Major errors in procedures/use of equipment. Could not establish position. Failed to recognize checkpoints or adjust for deviations in time and course. Did not remain within the confines of assigned airspace.

A3.4.4. Area C-2: Navigation (NAV/CSO/OSO).

- A3.4.4.1. Q. Procedures required by the flight manual and governing directives were accomplished with no more than minor discrepancies that did not adversely affect the mission. Demonstrated satisfactory capability to navigate using DR procedures. At no time allowed the airplane to deviate more than 6 nautical miles from the planned/replanned course or to deviate outside ATC assigned/protective lateral airspace. ETAs (if applicable) were revised as necessary and were accurate within 3 minutes. Notified pilot of airspeed restrictions or potential traffic conflicts within NAS.
- A3.4.4.2. Q-. Procedures required by the flight manual and governing directives were accomplished with deviations, omissions, or errors which indicated a definite need for study and/or additional training. Slow to recognize airplane course deviation, but at no time allowed the airplane to deviate more than 10 nautical miles from the planned/replanned course. ETAs were not accurate within 3 minutes when reporting procedures did not apply. Information obtained was not always accurate and complete, but was sufficient to allow reconstruction of the mission. Performance was the minimum acceptable.
- A3.4.4.3. U. Not up to standards of Qualified with Training. Allowed the airplane to deviate outside of the ATC assigned/perspective lateral airspace. ETAs were not accurate within 3 minutes when reporting procedures apply.

A3.4.5. Area C-3: Instrument Interpretation (Navigator/CSO/OSO/WSO/DSO).

- A3.4.5.1. Q. Demonstrated satisfactory knowledge of basic instrument procedures, penetration, and approach procedures. Can quickly analyze flight instruments, determine aircraft attitude, and is knowledgeable of required action to correct the aircraft to level flight. Effectively monitored energy levels to ensure parameters were not exceeded.
- A3.4.5.2. Q-. Limited knowledge of instrument procedures. Slow to recognize aircraft attitudes and corrective actions required, but did determine proper corrections within a safe time period.

A3.4.5.3. U. Faulty or insufficient knowledge of instrument procedures. Unable to properly interpret instruments or recognize aircraft attitude.

A3.4.6. Area C-4: Fuel Management (WSO/NAV/CSO/OSO). (IF APPLICABLE).

- A3.4.6.1. Q. Fuel planning and enroute fuel management procedures required by the flight manual and governing directives were accomplished with no more than minor discrepancies that did not adversely affect the safety or effectiveness of the mission.
- A3.4.6.2. Q-. Knowledge of procedures required by the flight manual and governing directives was marginal.
- A3.4.6.3. U. Not up to standards of Qualified with Training.

A3.4.7. Area C-5: Equipment Operation.

- A3.4.7.1. Q. Equipment was operated in accordance with prescribed procedures and with no more than minor deviations or omissions. Satisfactory results were obtained consistent with existing conditions. Equipment malfunctions were properly analyzed and corrected when possible for satisfactory equipment capability. Equipment crosschecks and data collection were effectively integrated with flight navigation.
- A3.4.7.2. Q-. Equipment was not operated in accordance with prescribed procedures, but the mission was not adversely affected and equipment could not have been damaged. Variations and omissions in prescribed procedures, erroneous data insertion, or faulty techniques indicated a definite need for study.
- A3.4.7.3. U. Unfamiliar with equipment operations, damaged or destroyed equipment. Mission accomplishment compromised.

A3.4.8. Area C-6: Descent and Landing.

- A3.4.8.1. Q. Procedures required by the flight manual, checklists, and governing directives were accomplished with no more than minor deviations, omissions, or errors that did not effect the mission. Monitored aircraft position throughout arrival and provided heading and altitude as required. Ensured safe terrain clearance. Understood approach control instructions. Appropriate FLIP publications were correctly used.
- A3.4.8.2. Q-. Procedures required by the flight manual, checklist, and governing directives were accomplished with deviations, omissions, or errors which indicated a definite need for study and/or additional training. Performance or knowledge was the minimum acceptable.
- A3.4.8.3. U. Lack of knowledge and situational awareness caused major deviations to safety and mission accomplishment.

A3.4.9. Area C-7: Post flight.

- A3.4.9.1. Q. Checklists, forms, and reports were accomplished with no more than minor deviations, omissions, or errors that did not adversely affect their intent.
- A3.4.9.2. Q-. Checklists, forms, and reports were accomplished in a manner that indicated a definite need for study and/or additional training. Performance or knowledge was the minimum acceptable.

A3.4.9.3. U. Failed to accomplish post flight duties, forms were unacceptable, post flight reports improperly filled out.

A3.4.10. Area C-8: Systems Knowledge.

- A3.4.10.1. Q. Thorough knowledge of aircraft systems, limitations, and performance characteristics.
- A3.4.10.2. Q-. Knowledge of aircraft systems, limitation, and performance characteristics sufficient to perform the mission safely. Deficiencies either in depth of knowledge or comprehension.
- A3.4.10.3. U. Unfamiliar with systems operation. Unable to recall details, ops limits, or operational processes.

A3.5. Area D: Instructor.

A3.5.1. Area D-1: Instructional Ability.

- A3.5.1.1. Q. Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary.
- A3.5.1.2. Q-. Instruction was essentially correct with some deviations or omissions. Problems in communications or analysis did not degrade effectiveness of instructions.
- A3.5.1.3. U. Inability to effectively communicate with the upgradee. Did not provide corrective action where necessary. Did not plan ahead or anticipate upgradee problems.

A3.5.2. Area D-2: Briefing/Debriefing.

- A3.5.2.1. Q. Briefings were well organized, accurate and thorough. Reviewed student's present level of training and defined mission events to be performed. Excellent ability during critique to reconstruct the flight, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents in accordance with prescribed directives. Training syllabi reflected actual performance of student relative to standard. Briefed the student's requirements for the next mission.
- A3.5.2.2. Q-. Minor errors or omissions in briefing, critique, and/or training documents that did not affect students progress.
- A3.5.2.3. U. Briefings were marginal or non-existent. Did not review student's training folder or past performance. Failed to adequately critique the student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies. Incomplete briefing of student's training requirements/objectives for mission.

A3.5.3. Area D-3: Demonstration and Performance

- A3.5.3.1. Q. Effectively demonstrated procedures and techniques on the ground and inflight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.
- A3.5.3.2. Q-. Minor discrepancies in the above criteria that did not affect safety or adversely affect student performance.

A3.5.3.3. U. Did not demonstrate correct procedure or technique. Insufficient knowledge about aircraft systems, procedures, and/or proper source material.

A3.5.4. Area D-4: Conduct of the Mission

- A3.5.4.1. Q. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.
- A3.5.4.2. Q-. Untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not effectively used to the extent specific mission objectives were not achieved.
- A3.5.4.3. U. Mission execution prevented accomplishment of a major portion of the mission. Undisciplined actions violated training rules repeatedly.

A3.6. Area E: Mission.

A3.6.1. Area E-1: Knowledge.

- A3.6.1.1. Q. Fully knowledgeable in mission requirements, test plan directives, aircraft limitations, and partial flight manual. Effectively coordinated with other crew members and project personnel.
- A3.6.1.2. Q-. Demonstrated a limited knowledge of mission requirements, test plan directives, aircraft limitations, or the partial flight manual which degraded a portion of the mission objective or CRM.
- A3.6.1.3. U. Inadequate knowledge of mission requirements, test plan directive, aircraft limitations, and partial flight manual. Did not effectively use resources. Directly affected successful mission accomplishment.

A3.6.2. Area E-2: Planning.

- A3.6.2.1. Q. Considered all factors necessary for mission accomplishment to include weather, mission profile, airspace utilization/restrictions, and proper documentation.
- A3.6.2.2. Q-. Limited consideration of all factors necessary for mission accomplishment. However, did not affect mission objective directly, but may have contributed toward lack of effective CRM.
- A3.6.2.3. U. Did not consider all factors necessary for mission accomplishment. Lack of consideration contributed negatively towards successful mission completion.

A3.6.3. Area E-3: Execution.

- A3.6.3.1. Q. Accomplished major mission objectives in a timely and skillful manner.
- A3.6.3.2. Q-. Errors or omission were made which did not render mission ineffective.
- A3.6.3.3. U. Improper execution of duties negatively impacted mission accomplishment.

A3.6.4. Area E-4: Security (Critical).

- A3.6.4.1. Q. Adequate security of mission information and material was maintained throughout preflight, flight, and post flight.
- A3.6.4.2. U. Inadequate security procedures were carried out which would lead to the compromise of mission information and/or material.

Attachment 4

CAREER ENLISTED AVIATOR (CEA) AIRCREW GRADING CRITERIA

- **A4.1. General Grading Standards.** This chapter contains the criteria for administering initial qualification, qualification, requalification, and instructor enlisted aircrew evaluations.
 - A4.1.1. The grading criteria in this attachment are divided into four sections: Ground, General, Qualification and Instructor. Use all sections for criteria applicable to the events performed on the evaluation.
 - A4.1.2. Grading criteria for every situation could not possibly be covered in this attachment. The evaluator's experience and good judgment are relied upon to provide a sensible analysis of the applicable items evaluated. Where more restrictive flight manual procedures are established, they will take precedence.
 - A4.1.3. If published guidance is not sufficient or is not applicable, with concurrence from AFMC/A3V, either follow lead MAJCOM criteria or develop local guidelines IAW paragraph 1.1.

A4.2. Area A: Ground Phase.

A4.2.1. Area A-1: Publications.

- A4.2.1.1. Digital TO's are approved for use by individual aircrew members.
- A4.2.1.2. Q. Assigned flight publications were current, complete, and available/usable for any of the unit taskings.
- A4.2.1.3. Q-. Assigned flight publications contained some deviations, omissions, and/or errors; however, they contained everything necessary to effectively accomplish the mission and did not compromise safety.
- A4.2.1.4. U. Contained major deviations, omissions, and/or errors or discrepancies which compromised safety.

A4.2.2. Area A-2: Emergency Procedures Evaluation.

- A4.2.2.1. Q. Displayed correct, immediate response to Bold Face emergency scenarios. Effectively used checklist(s) for non-Bold Face procedures.
- A4.2.2.2. Q-. Displayed correct, immediate response to Bold Face emergency scenarios. Response to non-Bold Face emergencies or follow-on steps to Bold Face procedures was slow and/or confused. Used the checklist(s) when appropriate, but slow to locate required data. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.
- A4.2.2.3. U. Incorrect and/or unacceptably slow response to Bold Face emergency scenarios. Unable to analyze problems or take corrective action. Did not use checklist(s) or lacks acceptable familiarity with its arrangement or contents. Performance and/or knowledge were unacceptable.

A4.3. Area B: General.

A4.3.1. Area B-1: Safety (Critical).

- A4.3.1.1. Q. Aware of and complied with all safety factors required for safe aircraft and/or systems operation and mission accomplishment.
- A4.3.1.2. U. Was not aware of or did not comply with all safety factors required for safe aircraft and/or systems operation or mission accomplishment. Did not adequately clear aircraft and/or systems. Operated the aircraft and/or systems in a dangerous manner.

A4.3.2. Area B-2: Judgment (Critical).

- A4.3.2.1. Q. Formed opinions objectively, authoritatively and wisely, leading to timely and correct decisions positively affecting the outcome of the assigned mission.
- A4.3.2.2. U. Decisions, or lack thereof, were slow and/or incorrect which resulted in the potential or actual failure to accomplish the assigned mission.

A4.3.3. Area B-3: Flight Discipline (Critical).

- A4.3.3.1. Q. Demonstrated strict professional flight and crew discipline throughout all phases of the mission. Complied with rules and instructions.
- A4.3.3.2. U. Failed to exhibit strict flight or crew discipline. Violated and/or ignored rules or instructions.

A4.3.4. Area B-4: Briefings.

- A4.3.4.1. Q. Presented briefing in a professional manner. Briefing was well organized and presented in a logical sequence. Effectively used training aids, if applicable. Concluded briefing in allotted time, if applicable. Crew members clearly understood briefing. Briefed corrective action from previous mission and potential problem areas, when appropriate.
- A4.3.4.2. Q-. Presentation was out of sequence, hard to follow, contained some redundancy. Did not make effective use of available training aids, if applicable. Dwelled on non-essential items. Briefed longer than allotted time, if applicable. Crew members had to ask for clarification due to briefing inconsistencies or errors. Did not identify potential problem areas from previous mission, when appropriate. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.
- A4.3.4.3. U. Confusing presentation. Required items not briefed. Did not use training aids, if applicable. Presentation created doubts or confusion for crew members. Ignored past problem areas. Performance and/or knowledge were unacceptable.

A4.3.5. Area B-5: Personal/Professional Equipment.

- A4.3.5.1. Q. Possessed required personal/professional equipment items and was thoroughly familiar with equipment requirements, preflight and use.
- A4.3.5.2. Q-. Possessed required personal/professional equipment items and was familiar with most of the requirements, preflight and use. Deviations/lack of knowledge did not affect personal and/or flight safety. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.

A4.3.5.3. U. Did not possess required personal/professional equipment items. Unfamiliar with required personal/professional equipment requirements, preflight and use. Performance and/or knowledge were unacceptable.

A4.3.6. Area B-6: Forms, Reports, Logs.

- A4.3.6.1. Q. Completed all required preflight and postflight forms and documentation with only minor error(s) that did not prevent accurate data recording.
- A4.3.6.2. Q-. Completed all required preflight and postflight forms and documentation with some errors or omissions that had to be corrected but did not prevent accurate data recording. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.
- A4.3.6.3. U. Forms were incomplete and/or improperly filled out. Knowledge of form(s) completion was unacceptable. Errors and/or omissions prevented accurate data recording. Performance and/or knowledge were unacceptable.

A4.3.7. Area B-7: Mission/Flight Planning.

- A4.3.7.1. Q. Checked all factors applicable to flight in accordance with applicable directives. Aware of mission and alternate mission requirements and planned accordingly. Read and signed off/initialed all items in the Flight Crew Information File (FCIF)/Read Files. Completely prepared at briefing time.
- A4.3.7.2. Q-. Checked all factors applicable to flight in accordance with applicable directives. Aware of mission and alternate mission requirements and planned accordingly; however, made minor errors and/or omissions that did not detract from safety and/or mission effectiveness. Read and signed off/initialed all items in the Flight Crew Information File (FCIF)/Read Files. Demonstrated limited knowledge of performance capabilities or approved operating procedures/ rules in some areas. Not completely prepared at briefing time. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.
- A4.3.7.3. U. Made major errors and/or omissions that had the potential to prevent a safe or effective mission. Knowledge of operating data or procedures was unacceptable. Did not review or initial FCIF items. Not prepared at briefing time. Performance and/or knowledge were unacceptable.

A4.3.8. Area B-8: Use of Checklists/Test Cards.

- A4.3.8.1. Q. Procedures required by the flight manual, checklist and applicable directives were accomplished with no omissions or deviations which detracted from the overall safe and/or efficient conduct of the mission.
- A4.3.8.2. Q-. Procedures required by the flight manual, checklist and applicable directives were accomplished with omissions or deviations which detracted from the overall efficient conduct of the mission. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.
- A4.3.8.3. U. Procedures required by the flight manual, checklist and applicable directives were accomplished with major omissions or deviations which detracted from

the overall safe and/or efficient conduct of the mission. Performance and/or knowledge were unacceptable.

A4.3.9. Area B-9: Crew Coordination.

- A4.3.9.1. Q. Coordinated effectively with other crewmembers/mission personnel. Provided/followed clear, concise instructions.
- A4.3.9.2. Q-. Coordinated effectively with other crewmembers/mission personnel; however, some instructions were not clear and/or concise causing some confusion and detracting from the overall efficient conduct of the mission. Performance met the minimum acceptable standards; however, additional training or debrief was required.
- A4.3.9.3. U. Failed to coordinate with crewmembers/mission personnel. Did not provide/follow clear and concise instructions resulting in the unsafe and/or inefficient conduct of the mission. Performance was unacceptable. Safety was or had the potential to be compromised.

A4.3.10. Area B-10: Communication Procedures.

- A4.3.10.1. Q. Radio and intra-cockpit communications were concise, accurate and effectively used to enhance situational awareness, mutual support and/or mission accomplishment.
- A4.3.10.2. Q-. Minor terminology errors or omissions occurred, but did not significantly detract from situational awareness, mutual support and/or mission accomplishment. Extraneous comments presented minor distractions. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.
- A4.3.10.3. U. Radio and intra-cockpit communications were inadequate or excessive. Inaccurate or confusing terminology significantly detracted from mutual support, situational awareness and/or mission accomplishment. Performance and/or knowledge were unacceptable. Safety was or had the potential to be compromised.

A4.3.11. Area B-11: Fuel Conservation (Boom Operator, Flight Engineer, Special Missions Aviator and Loadmaster).

- A4.3.11.1. Q. Possessed a high level of knowledge of all applicable aircraft publications and other governing directives and understood how to apply both to enhance fuel conservation. Successfully applied fuel conservation procedures during mission planning and throughout the mission.
- A4.3.11.2. Q-. Possessed some knowledge of applicable aircraft publications and other governing directives and understood how to apply both to enhance fuel conservation. Successfully applied some fuel conservation procedures, but failed to apply fuel conservation procedures during mission planning or during some phases of the mission. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.
- A4.3.11.3. U. Unaware of fuel conservation procedures. Failed to apply any fuel conservation procedures during mission planning or any phase of the mission. Performance and/or knowledge were unacceptable.

A4.4. Area C: Qualification (Loadmaster).

- A4.4.1. Area C-1: Preflight.
- A4.4.2. Area C-2: Aircraft Configuration.
- A4.4.3. Area C-3: Load Planning/Inspection.
- A4.4.4. Area C-4: Hazardous Material.
- A4.4.5. Area C-5: Onload/Offload Procedures.
- A4.4.6. Area C-6: Winching Procedures.
- A4.4.7. Area C-7: Tiedown/Restraint.
- A4.4.8. Area C-8: Passenger Handling/Briefing.
- A4.4.9. Area C-9: Anti-Hijacking/Aircraft Security.
- A4.4.10. Area C-10: Border Clearance.
- A4.4.11. Area C-11: Predeparture, In-flight and Post-Mission Duties/Checklists.
- A4.4.12. Area C-12: Scanner Duties.
- A4.4.13. Area C-13: Engine Running Onload/Offload.
- A4.4.14. The following criteria must be used in determining a grade for execution of applicable aircraft procedures (A4.4.1-A4.4.13) as prescribed in the flight manual, checklist, supplementary/partial manuals and other governing directives.
 - A4.4.14.1. Q. Procedures required by the flight manual, checklist, supplementary/partial manuals and applicable directives were accomplished without omissions or deviations which detracted from the overall efficient/effective conduct of the mission and/or safety.
 - A4.4.14.2. Q-. Procedures required by the flight manual, checklist, and applicable directives were accomplished with omissions or deviations which detracted from the overall efficient/effective conduct of the mission. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required. Safety was not compromised.
 - A4.4.14.3. U. Procedures required by the flight manual, checklist, supplementary/partial manuals and applicable directives were accomplished with major omissions, deviations, or errors which detracted from the overall efficient/effective conduct of the mission. Performance and/or knowledge were unacceptable. Safety was or had the potential to be compromised.

A4.4.15. Area C-14: Weight and Balance.

- A4.4.15.1. Q. Checked or verified all factors applicable to the flight. Ensured the crew was aware of special requirements/equipment necessary for the flight. Completed DD Form 365-4 accurately/legibly with only minor errors/omissions that did not affect mission effectiveness or safety. Errors in takeoff or landing gross weight and percent of MAC did not exceed established Q tolerances. Did not exceed aircraft gross weight takeoff or CG limitations for takeoff or landing.
- A4.4.15.2. Q-. Checked or verified all factors applicable to the flight. Ensured the crew was aware of special requirements/equipment necessary for the flight. Completed DD

Form 365-4 accurately/legibly with errors/omissions that affected mission effectiveness. Safety was not compromised. Errors in takeoff or landing gross weight and percent of MAC exceeded established tolerances. Did not exceed aircraft gross weight takeoff or CG limitations for takeoff or landing. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.

A4.4.15.3. U. Major errors or omissions that had an adverse effect on mission effectiveness and/or safety. Errors in takeoff or landing gross weight and percent of MAC exceeded established tolerances. Exceeded aircraft gross weight takeoff or CG limitations for takeoff or landing. Performance and/or knowledge were unacceptable.

A4.4.16. Area C-15: Oxygen.

A4.4.17. Area C-16: Ramp and Door.

A4.4.18. Area C-17: Hydraulics/Electrical.

A4.4.19. Area C-18: APU/External Power.

A4.4.20. Area C-19: Aircraft Loading Limitations.

A4.4.21. Area C-20: Restraint Rail/Roller Conveyor.

A4.4.22. Area C-21: Emergency Equipment.

A4.4.23. The following criteria must be used in determining a grade for operation of applicable aircraft systems and equipment (A4.4.16-A4.4.22) as prescribed in the flight manual, checklist, supplementary/partial manuals, and other governing directives. This includes the individual's knowledge and analysis of equipment malfunctions/corrective action.

A4.4.23.1. Q. Demonstrated and/or verbally explained system/equipment operation, component location and limitations with only minor discrepancies which did not detract from mission effectiveness and/or safety.

A4.4.23.2. Q-. Demonstrated and/or explained system/equipment operation, component location and limitations with only minor discrepancies which detracted from mission effectiveness. Safety was not compromised. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.

A4.4.23.3. U. Demonstrated and/or explained system/equipment operation, component location and limitations with major discrepancies which detracted from mission effectiveness. Performance and/or knowledge were unacceptable. Safety was or had the potential to be compromised.

A4.5. Area C: Qualification (Boom Operator).

A4.5.1. Area C-1: Preflight.

A4.5.2. Area C-2: Predeparture, In-flight and Post-Mission Duties/Checklists.

A4.5.3. The following criteria must be used in determining a grade for execution of applicable aircraft procedures (A4.5.1-A4.5.2) as prescribed in the flight manual, checklist, supplementary/partial manuals and other governing directives.

- A4.5.3.1. Q. Procedures required by the flight manual, checklist, supplementary/partial manuals and applicable directives were accomplished without omissions or deviations which detracted from the overall efficient/effective conduct of the mission and/or safety.
- A4.5.3.2. Q-. Procedures required by the flight manual, checklist, and applicable directives were accomplished with omissions or deviations which detracted from the overall efficient/effective conduct of the mission. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required. Safety was not compromised.
- A4.5.3.3. U. Procedures required by the flight manual, checklist, supplementary/partial manuals and applicable directives were accomplished with major omissions, deviations, or errors which detracted from the overall efficient/effective conduct of the mission. Performance and/or knowledge were unacceptable. Safety was or had the potential to be compromised.

A4.5.4. Area C-3: Normal Refueling Procedures.

- A4.5.4.1. Q. Demonstrated a satisfactory knowledge of procedures and equipment. Complied with directives. Coordinated with tanker and receiver pilots. Boom control was smooth and contacts were effective. Monitored receiver closely and gave corrections as necessary. Used proper procedures and techniques that would not jeopardize mission or safety.
- A4.5.4.2. Q-. Same as above except for minor deviations which did not or would not jeopardize safety or mission effectiveness. Boom control was slightly erratic resulting in contacts being delayed.
- A4.5.4.3. U. Failed to accomplished required checks. Boom control was erratic, and/or technique used in attempting contacts resulted in delays to such extent that fuel could not be offloaded within the time available. Inadequate knowledge, procedures, or techniques jeopardized safety of flight.

A4.5.5. Area C-4: Mission Systems.

A4.5.6. Area C-5: Emergency Equipment.

- A4.5.6.1. The following criteria must be used in determining a grade for operation of applicable aircraft equipment (A4.5.5-A4.5.6) as prescribed in the flight manual, checklist, supplementary/partial manuals, and other governing directives. This includes the individual's knowledge and analysis of equipment malfunctions/corrective action.
- A4.5.6.2. Q. Demonstrated and/or verbally explained system/equipment operation, component location and limitations with only minor discrepancies which did not detract from mission effectiveness and/or safety.
- A4.5.6.3. Q-. Demonstrated and/or explained system/equipment operation, component location and limitations with only minor discrepancies which detracted from mission effectiveness. Safety was not compromised. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.
- A4.5.6.4. U. Demonstrated and/or explained system/equipment operation, component location and limitations with major discrepancies which detracted from mission

effectiveness. Performance and/or knowledge were unacceptable. Safety was or had the potential to be compromised.

A4.6. Area C: Qualification (Flight Engineer/Special Missions Aviator).

- A4.6.1. Area C-1: Preflight.
- A4.6.2. Area C-2: Predeparture, In-flight and Post-Mission Duties/Checklists.
- A4.6.3. The following criteria must be used in determining a grade for execution of applicable aircraft procedures (A4.6.1-A4.6.2) as prescribed in the flight manual, checklist, supplementary/partial manuals and other governing directives.
 - A4.6.3.1. Q. Procedures required by the flight manual, checklist, supplementary/partial manuals and applicable directives were accomplished without omissions or deviations which detracted from the overall efficient/effective conduct of the mission and/or safety.
 - A4.6.3.2. Q-. Procedures required by the flight manual, checklist, and applicable directives were accomplished with omissions or deviations which detracted from the overall efficient/effective conduct of the mission. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required. Safety was not compromised.
 - A4.6.3.3. U. Procedures required by the flight manual, checklist, supplementary/partial manuals and applicable directives were accomplished with major omissions, deviations, or errors which detracted from the overall efficient/effective conduct of the mission. Performance and/or knowledge were unacceptable. Safety was or had the potential to be compromised.

A4.6.4. Area C- 3: Takeoff and Landing Data (TOLD).

- A4.6.4.1. Q. Skilled and knowledgeable in aircraft performance. Checked or verified and applied all factors applicable to the flight. All data completed and/or transcribed accurately/legibly with only minor errors/omissions that did not affect mission effectiveness or safety. All computations were within established Q criteria.
- A4.6.4.2. Q-. Demonstrated limited knowledge and/or ability during completion of TOLD. Checked or verified and applied all factors applicable to the flight. All data completed and/or transcribed accurately/legibly; however, errors/omissions negatively impacted or had the potential to impact mission effectiveness. Safety was not compromised. All computations were within established Q- criteria. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.
- A4.6.4.3. U. Demonstrated unsatisfactory knowledge and/or ability during completion of TOLD or failed to compute TOLD card. Major errors or omissions had an adverse effect on mission effectiveness and/or safety. Did not meet Q- criteria.

A4.6.5. Area C-4: Weight and Balance.

A4.6.5.1. Q. Checked or verified all factors applicable to the flight. Ensured the crew was aware of special requirements/equipment necessary for the flight. Completed DD Form 365-4 accurately/legibly with only minor errors/omissions that did not affect mission effectiveness or safety. Errors in takeoff or landing gross weight and percent of

MAC did not exceed established Q tolerances. Did not exceed aircraft gross weight takeoff or CG limitations for takeoff or landing.

A4.6.5.2. Q-. Checked or verified all factors applicable to the flight. Ensured the crew was aware of special requirements/equipment necessary for the flight. Completed DD Form 365-4 accurately/legibly with errors/omissions that affected mission effectiveness. Safety was not compromised. Errors in takeoff or landing gross weight and percent of MAC exceeded established tolerances. Did not exceed aircraft gross weight takeoff or CG limitations for takeoff or landing. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.

A4.6.5.3. U. Major errors or omissions that had an adverse effect on mission effectiveness and/or safety. Errors in takeoff or landing gross weight and percent of MAC exceeded established tolerances. Exceeded aircraft gross weight takeoff or CG limitations for takeoff or landing. Performance and/or knowledge were unacceptable.

A4.6.6. Area C-5: Engines/Auxiliary Power Unit.

A4.6.7. Area C-6: Fuel.

A4.6.8. Area C-7: Electrical.

A4.6.9. Area C-8: Hydraulics.

A4.6.10. Area C-9: Flight Controls.

A4.6.11. Area C-10: Air Conditioning/Pressurization.

A4.6.12. Area C-11: Anti-ice/De-ice.

A4.6.13. Area C-12: Windows/Doors/Hatches.

A4.6.14. Area C-13: Radar.

A4.6.15. Area C-14: Oxygen.

A4.6.16. Area C-15: Fire Protection/Detection.

A4.6.17. Area C-16: Radios/Communications.

A4.6.18. Area C-17: Instruments/Lighting.

A4.6.19. Area C-18: Miscellaneous Equipment.

A4.6.20. Area C-19: Emergency Equipment.

A4.6.21. The following criteria must be used in determining a grade for operation of applicable aircraft systems and equipment (A4.6.6-A4.6.20) as prescribed in the flight manual, checklist, supplementary/partial manuals, and other governing directives. This includes the individual's knowledge and analysis of equipment malfunctions/corrective action.

A4.6.21.1. Q. Demonstrated and/or verbally explained system/equipment operation, component location and limitations with only minor discrepancies which did not detract from mission effectiveness and/or safety.

A4.6.21.2. Q-. Demonstrated and/or explained system/equipment operation, component location and limitations with only minor discrepancies which detracted from mission

effectiveness. Safety was not compromised. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.

A4.6.21.3. U. Demonstrated and/or explained system/equipment operation, component location and limitations with major discrepancies which detracted from mission effectiveness. Performance and/or knowledge were unacceptable. Safety was or had the potential to be compromised.

Area C-20: Engine Start/Taxi/Engine Shutdown (C-135 Speckled Trout Flight Engineer). A4.6.22. Not Used.

A4.6.23. This portion of the flight engineer qualification evaluation will be administered by a current and qualified evaluator pilot. See AFI 11-202 Volume 2 for instructions to complete the AF Form 8 when multiple evaluators are used.

A4.6.24. Area C-21: Engine Start Procedures.

- A4.6.24.1. Q. Accomplished engine start IAW flight manual procedures and checklists. Used correct hand signals.
- A4.6.24.2. Q- Accomplished engine start with omissions or deviations from flight manual checklists procedures that did not affect safety.
- A4.6.24.3. U. Omitted required procedures. Deviations to flight manual could potentially damage aircraft or mission equipment

A4.6.25. Area C-22: Taxi Procedures.

- A4.6.25.1. Q. Ensured adequate maneuvering space for aircraft. Taxi speed was adequate for existing conditions. Satisfactorily used brakes. Displayed satisfactory knowledge of marshaling signals.
- A4.6.25.2. Q-. Failed to advise pilot that taxi speed was erratic. Deviations or omissions from flight manual procedures but did not affect safety or mission accomplishment.
- A4.6.25.3. U. Failed to advise pilot that taxi speed was dangerous to aircraft control or systems.

A4.6.26. Area C-23: Engine Shutdown Procedures.

- A4.6.26.1. Q. Accomplished engine shutdown IAW flight manual procedures and applicable checklists.
- A4.6.26.2. Q-. Accomplished engine shutdown with significant omissions or deviations from flight manual checklists procedures that did not affect safety.
- A4.6.26.3. U. Omitted required procedures. Deviations to flight manual which could potentially damage aircraft or mission equipment.

A4.7. Area C: Qualification (Mission Systems Specialist, 1A3/1A8) (Airborne Maintenance Technician (AMT)/Scanner EC-130H)

- A4.7.1. Area C-1: Aircraft/Mission System Preflight.
- A4.7.2. Area C-2: Mission System Operations.
- A4.7.3. Area C-3: Mission Execution.

- A4.7.4. Area C-4: Anti-Hijacking/Aircraft Security.
- A4.7.5. Areas C-5 through C-10 applies to AMT/Scanner only.
- A4.7.6. Area C-5: Predeparture, In-flight and Post-Mission Duties/Checklists.
- A4.7.7. Area C-6: Malfunction Analysis/In flight Repair.
- A4.7.8. Area C-7: System Shutdown/Descent.
- A4.7.9. Area C-8: COMSEC/Security Procedures (Critical).
- A4.7.10. Area C-9: Passenger Handling.
- A4.7.11. Area C-10: Scanner Duties.
- A4.7.12. Area C-11: Debriefing.
- A4.7.13. The following criteria must be used in determining a grade for execution of applicable aircraft procedures (A4.7.1-A4.7.4 and A4.7.6-A4.7.12) as prescribed in the flight manual, checklist, supplementary/partial manuals and other governing directives.
 - A4.7.13.1. Q. Procedures required by the flight manual, checklist, supplementary/partial manuals and applicable directives were accomplished without omissions or deviations which detracted from the overall efficient/effective conduct of the mission and/or safety.
 - A4.7.13.2. Q-. Procedures required by the flight manual, checklist, and applicable directives were accomplished with omissions or deviations which detracted from the overall efficient/effective conduct of the mission. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required. Safety was not compromised.
 - A4.7.13.3. U. Procedures required by the flight manual, checklist, supplementary/partial manuals and applicable directives were accomplished with major omissions, deviations, or errors which detracted from the overall efficient/effective conduct of the mission. Performance and/or knowledge were unacceptable. Safety was or had the potential to be compromised.
- A4.7.14. Area C-12: General Aircraft Systems (Non-PME) (AMT/Scanner Only).
- A4.7.15. Area C-13: Prime Mission Equipment (PME) (AMT/Scanner Only).
- A4.7.16. Area C-14: Emergency Equipment.
- A4.7.17. The following criteria must be used in determining a grade for operation of applicable aircraft systems and equipment (A4.7.14-A4.7.16) as prescribed in the flight manual, checklist, supplementary/partial manuals, and other governing directives. This includes the individual's knowledge and analysis of equipment malfunctions/corrective action.
 - A4.7.17.1. Q. Demonstrated and/or verbally explained system/equipment operation, component location and limitations with only minor discrepancies which did not detract from mission effectiveness and/or safety.
 - A4.7.17.2. Q-. Demonstrated and/or explained system/equipment operation, component location and limitations with only minor discrepancies which detracted from mission

effectiveness. Safety was not compromised. Performance and/or knowledge met the minimum acceptable standards; however, additional training or debrief was required.

A4.7.17.3. U. Demonstrated and/or explained system/equipment operation, component location and limitations with major discrepancies which detracted from mission effectiveness. Performance and/or knowledge were unacceptable. Safety was or had the potential to be compromised.

A4.8. Area D: Instructor (All crew positions).

A4.8.1. Area D-1: Instructional Ability.

- A4.8.1.1. Q. Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary. Planned ahead and made timely decisions.
- A4.8.1.2. Q-. Instruction was essentially correct with some deviations or omissions. Problems in communications or analysis did not degrade effectiveness of instruction.
- A4.8.1.3. U. Inability to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.

A4.8.2. Area D-2: Briefing/Debriefing.

- A4.8.2.1. Q. Briefings were well organized, accurate, and thorough. Reviewed student's present level of training and defined mission events to be performed. Excellent ability during critique to reconstruct the flight, and provide corrective guidance where appropriate. Completed all training documents in accordance with prescribed directives. Training syllabi grade reflected actual performance of student relative to standard. Briefed the student's requirements for next mission.
- A4.8.2.2. Q-. Minor errors or omissions in briefings, critique, and/or training documents that did not affect student progress.
- A4.8.2.3. U. Briefings were marginal or nonexistent. Did not review student's training folder or past performance. Failed to adequately critique student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies.

A4.8.3. Area D-3: Demonstration and Performance.

- A4.8.3.1. Q. Effectively demonstrated procedure and techniques on the ground and inflight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.
- A4.8.3.2. Q-. Minor discrepancies in the —Q. I criteria that did not affect safety or adversely affect student progress.
- A4.8.3.3. U. Did not demonstrate correct procedure or technique. Examinee demonstrated insufficient knowledge about aircraft systems, procedures, and/or proper source material.

ATTACHMENT 5

UAS PERSONNEL EVALUATION CRITERIA PILOT (ALL), RQ-4 AND MQ1/9 SENSOR OPERATOR

A5.1. General Grading Standards (PILOT).

- A5.1.1. The grading criteria in this attachment are divided into six sections: Ground Phase, General, Qualification, Instrument, Instructor, and Mission. Use all sections for criteria applicable to the events performed on the evaluation. These sections match the sections of the UAS Pilot flight evaluation worksheet specified in the AFMC Supplement to AFI 11-202V2.
- A5.1.2. Evaluate events in Section C with respect to aircraft equipment and normal duties as it pertains to the applicable crew position.

A5.2. Section A: Ground Phase.

A5.2.1. Area A-1: Publications.

- A5.2.1.1. Digital TO's are approved for use by individual aircrew members.
- A5.2.1.2. Q. Assigned flight publications were current, complete, and usable for any of the unit's tasking.
- A5.2.1.3. Q-. Assigned flight publications contained deviations, omissions, and/or errors; however, contained everything necessary to effectively accomplish the mission and did not compromise safety of flight.
- A5.2.1.4. U. Contained major deviations, omissions, and/or errors which compromise safety of flight.

A5.2.2. Area A-2: Emergency Procedures Evaluation.

- A5.2.2.1. Q. Displayed correct, immediate response to Boldface and non-Boldface emergency situations. Effectively used checklist.
- A5.2.2.2. Q-. Response to Boldface emergencies 100% correct. Response to certain areas of non-Boldface emergencies or follow-on steps to Boldface procedures was slow/confused. Used the checklist when appropriate, but slow to locate required data.
- A5.2.2.3. U. Incorrect response for Boldface emergency. Unable to analyze problems or take corrective action. Did not use checklist, or lacks acceptable familiarity with its arrangement or contents.

A5.3. Section B: General.

A5.3.1. Area B-1: Safety (Critical).

- A5.3.1.1. Q. Aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment.
- A5.3.1.2. U. Was not aware of or did not comply with all safety factors required for safe operation or mission accomplishment. A. clear lack of judgment hampered or precluded mission accomplishment. Allowed a dangerous situation to develop without taking proper corrective action or notifying other crew members.

A5.3.2. **Area B-2: Judgement** (Critical).

- A5.3.2.1. Q. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.
- A5.3.2.2. U. Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that safety could have been compromised.

A5.3.3. **Area B-3: Flight Discipline** (Critical).

- A5.3.3.1. Q. Demonstrated strict professional flight and crew discipline throughout all phases of the mission.
- A5.3.3.2. U. Failed to exhibit strict flight or crew discipline. Violated or ignored rules or instructions.

A5.3.4. Area B-4: Briefings.

- A5.3.4.1. Q. Well organized and presented in a logical sequence. Concluded briefing in a timely manner for the circumstances given and the mission profile. Presented briefing in a professional manner. Effective use of training/visual aids. Flight members clearly understood mission requirements. Established objectives for the mission. Presented all training events and effective technique discussion for accomplishing the mission. Considered the abilities of all flight members. Briefed corrective action from previous mission and probable problem areas when appropriate.
- A5.3.4.2. Q-. Events out of sequence, hard to follow, some redundancy. Did not make effective use of available training/visual aids. Dwelled on non-essential mission items. Omitted some minor training events. Limited discussion of techniques. Did not consider all flight members' abilities. Did not identify probable problem areas.
- A5.3.4.3. U. Confusing presentation. Did not allow time for element/crew briefing (if applicable) and preflight of personal equipment, aircraft and ordnance. Did not use training aids. Redundant throughout briefing. Lost interest of flight members. Presentation created doubts or confusion. Did not establish objectives for the mission. Omitted major training events or did not discuss techniques. Ignored flight members' abilities and past problem areas.

A5.3.5. Area B-5: Personal Equipment.

- A5.3.5.1. Q. Thoroughly familiar with personal equipment requirements, usage, and preflight.
- A5.3.5.2. Q-. Possessed required personal equipment items and was familiar with most of the preflight and usage procedures.
- A5.3.5.3. U. Unfamiliar with required personal equipment preflight and usage.

A5.3.6. Area B-6: Forms, Reports, Logs.

A5.3.6.1. Q. Completed or supervised completion of all required preflight and post flight forms and documentation without significant error.

- A5.3.6.2. Q-. Completed or supervised completion of all required preflight and post flight forms and documentation with some errors or omissions that had to be corrected.
- A5.3.6.3. U. Forms were incomplete, improperly filled out. Data on forms inaccurate detracting from recording the mission data.

A5.3.7. Area B-7: Flight Planning (If applicable).

- A5.3.7.1. Q. Developed a sound plan to accomplish the mission. Checked all factors applicable to flight in accordance with applicable directives. Considered NAS rules and requirements such as VFR/IFR and IFR/VFR transition, airspeed restrictions and potential traffic conflicts. Developed contingencies to mitigate potential risks. Aware of alternatives available, if flight cannot be completed as planned. Read and initialed for all items in the Flight Crew Information File (FCIF)/Read Files. Prepared at briefing time.
- A5.3.7.2. Q-. Same as above, except minor error(s) or omission(s) that did not detract from mission effectiveness. Demonstrated limited knowledge of performance capabilities or approved operating procedures/ rules in some areas.
- A5.3.7.3. U. Made major error(s) or omission(s) that would have prevented a safe or effective mission. Displayed faulty knowledge of operating data or procedures. Did not review or initial Go/No-Go items. Not prepared at briefing time.

A5.3.8. Area B-8: Use of Checklists.

- A5.3.8.1. Q. Used current checklist and accomplished all items in proper sequence with no deviations or omissions.
- A5.3.8.2. Q-. Only minor deviations from checklist procedures were noted.
- A5.3.8.3. U. Failed to use current checklist or deviated from checklist procedures resulting in the mission being compromised.

A5.3.9. Area B-9: Crew Resource Management.

- A5.3.9.1. Q. Coordinated effectively with other crewmembers/mission personnel. Effectively used all crewmembers. Gave clear, concise crew instructions.
- A5.3.9.2. Q-. Coordinated satisfactorily with other crewmembers/mission personnel. Some instructions were not clear and concise.
- A5.3.9.3. U. Failed to coordinate with crewmembers/mission personnel. Did not give clear and concise instructions. Failed to utilize resources causing degradation of the mission.

A5.3.10. Area B-10: Communication Procedures.

- A5.3.10.1. Q. Radio and intra-cockpit communications were concise, accurate and effective.
- A5.3.10.2. Q- Minor terminology errors or omissions occurred, but did not significantly detract from situational awareness, mutual support or mission accomplishment.
- A5.3.10.3. U. Radio communications over primary/secondary radios were inadequate or excessive. Inaccurate or confusing terminology significantly detracted from mutual support, situational awareness or mission accomplishment.

A5.3.11. Area B-11: Knowledge of Directives.

- A5.3.11.1. Q. Demonstrated thorough knowledge of applicable directives.
- A5.3.11.2. Q-. Minor errors in knowledge of applicable directives. Demonstrated deficiencies either in depth of knowledge or comprehension.
- A5.3.11.3. U. Demonstrated unsatisfactory knowledge of applicable directives.

A5.3.12. Area B-12: Fuel Conservation

- A5.3.12.1. Q. Possessed a high level of knowledge of all applicable aircraft publications and other governing directives and understood how to apply both to enhance fuel conservation. Successfully applied fuel conservation procedures during mission planning and through-out the mission execution.
- A5.3.12.2. Q-. Possessed some knowledge of applicable aircraft publications and other governing directives and understood how to apply both to enhance fuel conservation. Successfully applied some fuel conservation procedures, but failed to apply fuel conservation procedures during mission planning or during some phases of the mission.
- A5.3.12.3. U. Unaware of fuel conservation procedures. Failed to apply any fuel conservation procedures in any area of the mission.

A5.4. Section C: Qualification (MQ-1/9 "Predator" Pilot).

A5.4.1. Area C-1: Performance Data.

- A5.4.1.1. Q. Accurately computed/reviewed all required takeoff and landing data. Aware of abort considerations and runway condition.
- A5.4.1.2. Q-. Computed/reviewed required takeoff data with minor omissions or errors which did not detract from mission accomplishment or safety.
- A5.4.1.3. U. Major errors or omissions which compromise safety. Faulty or improper knowledge of performance data.

A5.4.2. Area C-2: Preflight Inspection.

- A5.4.2.1. Q. Accurately determined readiness of aircraft for flight. Used proper T.O. checklist to conduct preflight. Properly determined aircraft and GCS forms were in order and properly signed.
- A5.4.2.2. Q-. Minor procedural deviations which did not detract from the overall mission.
- A5.4.2.3. U. Major deviations in procedure which would preclude safe mission accomplishment. Failed to accurately determine readiness of aircraft for flight. Crew errors directly contributed to a late takeoff which degraded the mission or made it non-effective.

A5.4.3. Area C-3: Engine Start.

- A5.4.3.1. Q. Accomplished engine start IAW flight manual procedures and checklists.
- A5.4.3.2. Q-. Accomplished engine start with significant omissions or deviations from flight manual checklist procedures that did not affect safety.

A5.4.3.3. U. Omitted required procedures. Deviations to flight manual which could potentially damage aircraft or mission equipment.

A5.4.4. Area C-4: Taxi.

- A5.4.4.1. Q. Ensured adequate maneuvering space for aircraft. Satisfactorily used power, steering, or brakes. Taxi speed was adequate for existing conditions. Displayed satisfactory knowledge of marshaling signals.
- A5.4.4.2. Q-. Taxi speed was erratic. Taxi was safe but over-controlled and rough when turning or using brakes. Deviations or omissions from flight manual procedures that did not affect safety or mission accomplishment.
- A5.4.4.3. U. Taxi speed dangerous to aircraft control or systems. Overused brakes causing hot brakes or tire damage. Intervention required to prevent further damage to aircraft.

A5.4.5. Area C-5: Takeoff.

- A5.4.5.1. Q. Maintained smooth aircraft control throughout takeoff. Performed takeoff IAW flight manual procedures.
- A5.4.5.2. Q-. Minor flight manual procedural or technique deviations. Control was rough or erratic.
- A5.4.5.3. U-. Takeoff potentially dangerous. Exceeded aircraft systems limitations. Raised gear too early/late. Failed to establish proper climb attitude. Over-controlled aircraft resulting in excessive deviations from intended flight path.

A5.4.6. Area C-6: Climb Procedures.

- A5.4.6.1. Q. Climb was IAW the applicable flight manual.
- A5.4.6.2. Q-. Some under or over-control. Flight manual deviations significant but did not affect safety of flight or mission accomplishment.
- A5.4.6.3. U. Failed to comply with flight manual procedures. Major deviation affecting safety and mission accomplishment.

A5.4.7. Area C-7: Traffic Pattern.

- A5.4.7.1. Q. Performed patterns/approaches IAW procedures outlined in the flight manual, operational procedures and local directives. Aircraft control was smooth and positive. Accurately aligned with runway. Maintained proper/briefed airspeed/AOA. Airspeed -5/+10 knots.
- A5.4.7.2. Q-. Performed patterns/approaches with minor deviations to procedures outlined in the flight manual, operational procedures and local directives. Aircraft control was not consistently smooth, but safe. Alignment with runway varied. Slow to correct to proper/briefed airspeed/AOA/ Airspeed -5/+15 knots.
- A5.4.7.3. U. Approaches not performed IAW procedures outlined in the flight manual, operational procedures and local directives. Erratic aircraft control. Large deviations in runway alignment. Exceeded Q- parameters.

A5.4.8. Area C-8--Go-Around:

- A5.4.8.1. Q. Initiated and performed go-around promptly IAW flight manual and operational procedures and directives.
- A5.4.8.2. Q-. Slow to initiate go-around or procedural steps.
- A5.4.8.3. U. Did not self-initiate go-around when appropriate. Techniques unsafe or applied incorrect procedures. Erratic aircraft control. Large deviations in runway alignment.
- A5.4.9. **Area C-9--Engine-Out Traffic Pattern.** Evaluate actions taken in response to actual or simulated emergencies that occur during the flight check (in-flight or on the ground) until the flight examiner declares the evaluation of the emergency procedure terminated.
 - A5.4.9.1. Q. Performed emergency procedures IAW applicable directives. Used sound judgment. Configured at the appropriate position/altitude. Smooth positive control of aircraft. Able to prioritize actions to safely recover the aircraft. Maintained aircraft control within appropriate standards.
 - A5.4.9.2. Q-. Performed emergency procedures with minor deviations, omissions, and/or errors from applicable directives. Configured at a position and altitude, which allowed for a safe approach. Minor deviations from procedures and altitudes/unnecessary maneuvering due to minor errors in planning or judgment; however, did not jeopardize the safe recovery of the aircraft.
 - A5.4.9.3. U. Judgment unsafe. Did not comply with applicable procedures. Erratic airspeed control compounded problems associated with the emergency. Performed emergency procedures with major deviations, omissions, and/or errors from recommended procedures and altitudes. Required excessive maneuvering due to inadequate planning or judgment. Unable to safely recover the aircraft.
- A5.4.10. **Area C-10 Landing:** Applicable to normal VFR approaches.
 - A5.4.10.1. Q. Performed landings IAW procedures outlined in the flight manual, operational procedures and local directives. Aircraft control was smooth and positive. Accurate runway alignment.
 - A5.4.10.2. Q-. Performed landings IAW procedures outlined in the flight manual, operational procedures and local directives with minor deviations, omissions, and/or errors which did not jeopardize safety of flight. Aircraft control was rough; however, accomplished runway alignment.
 - A5.4.10.3. U. Landing not performed IAW procedures outlined in the flight manual, operational procedures and local directives. Exceeded Q- criteria.

A5.4.11. Area C-11: After Landing.

- A5.4.11.1. Q. Appropriate after landing checks and aircraft taxi procedures were accomplished.
- A5.4.11.2. Q-. Significant deviations or omissions from established procedures but safety and mission effectiveness were not affected.
- A5.4.11.3. U. Checks were not accomplished in timely manner. Errors of omission committed without correction.

A5.4.12. Area C-12: Systems Knowledge.

- A5.4.12.1. Q. Thorough knowledge of aircraft systems, limitations, and performance characteristics.
- A5.4.12.2. Q-. Knowledge of aircraft systems, limitation, and performance characteristics sufficient to perform the mission safely. Deficiencies either in depth of knowledge or comprehension.
- A5.4.12.3. U. Unfamiliar with systems operation. Unable to recall details, ops limits, or operational processes.

A5.4.13. Area C-13: NAS Rules and Procedures.

- A5.4.13.1. Q. Complied with NAS rules/requirements.
- A5.4.13.2. Q-. Same as above but minor deviations detracted from safe accomplishment of the mission.
- A5.4.13.3. U. Unfamiliar with NAS rules and procedures. Unaware of potential traffic conflicts.

A5.5. Section C: Qualification (RQ-4A "Global Hawk" Pilot).

A5.5.1. The Global Hawk qualification evaluation may be accomplished in the simulator.

A5.5.2. Area C-1: Performance Data.

- A5.5.2.1. Q. Accurately computed/reviewed all required takeoff and landing data. Ensured all flight members were prepared. Aware of abort considerations, runway condition, weather, impact of weather on mission accomplishment.
- A5.5.2.2. Q-. Computed/reviewed required takeoff data with minor omissions or errors which did not detract from mission accomplishment or safety.
- A5.5.2.3. U. Major errors or omissions which compromise safety. Faulty or improper knowledge of performance data.

A5.5.3. Area C-2: Preflight Inspection.

- A5.5.3.1. Q. Established and adhered to station, engine start, taxi and take-off times to assure thorough preflight, check of personal equipment, crew briefing, etc. Accurately determined readiness of aircraft for flight.
- A5.5.3.2. Q-. Minor procedural deviations which did not detract from the overall mission.
- A5.5.3.3. U. Major deviations in procedure which would preclude safe mission accomplishment. Failed to accurately determine readiness of aircraft for flight. Crew errors directly contributed to a late takeoff which degraded the mission or made it non-effective.

A5.5.4. Area C-3: Engine Start.

- A5.5.4.1. Q. Accomplished engine start IAW flight manual procedures and checklists.
- A5.5.4.2. Q-. Accomplished engine start with significant omissions or deviations from flight manual checklist procedures that did not affect safety.

A5.5.4.3. U. Omitted required procedures. Deviations to flight manual which could potentially damage aircraft or mission equipment.

A5.5.5. Area C-4: Taxi (Critical).

- A5.5.5.1. Q. Coordinated all checks correctly in accordance with flight manual and local procedures. Operated aircraft safely. Performed takeoff IAW flight manual procedures and techniques.
- A5.5.5.2. U. Failed to coordinate with ground crew and safety observer prior to aircraft movement. Failed to adequately monitor taxi route operation. Intervention required to prevent damage to aircraft.

A5.5.6. Area C-5: Takeoff (Critical).

- A5.5.6.1. Q. Complete all checks correctly in accordance with flight manual and local procedures. Operated aircraft safely. Performed takeoff in accordance with flight manual procedures and techniques.
- A5.5.6.2. U. Failed to coordinate with ground crew and safety observer prior to aircraft movement. Takeoff potentially dangerous. Exceeded aircraft systems limitations. Failed to adequately monitor takeoff operation.

A5.5.7. Area C-6: Basic Control.

- A5.5.7.1. Q. Monitored basic aircraft control within specified tolerances dictated by the software and mission plan. Promptly reacted to flight deviations as a result of anomalies, contingency reaction triggered by software and aircraft conditions, manual initiated overrides, etc.
- A5.5.7.2. Q-. Minor procedural deviations, which did not detract from the overall mission.
- A5.5.7.3. U. Failed to anticipate vehicle actions dictated by the software and mission plan. Failed to monitor basic aircraft control. Failed to promptly react to flight deviations.

A5.5.8. Area C-7: In-flight Planning.

- A5.5.8.1. Q. Effectively performed in-flight planning, including changing profile by adding or deleting route segments or collections. Effectively adapted to dynamic changes in mission plan. Demonstrated ability to adjust mission profile to comply with time/fuel limitations, weather, area limits, mission constraints and objectives.
- A5.5.8.2. Q-. In-flight planning included minor deviations, which did not compromise safety, or significantly detract from the mission.
- A5.5.8.3. U. Unable to replan in-flight, or adapt to changing mission requirements. Consistently behind the aircraft. Action or inaction compromised safety and successful mission accomplishment.

A5.5.9. Area C-8: Override Commands

A5.5.9.1. Q. Concise operation of override commands including Full Override, On-Track, GOTO and Suspend. Successfully recognized actual or potential conflicts, and adjusted aircraft performance to safely avoid these conflicts.

- A5.5.9.2. Q-. Operation of override commands included minor deviations which did not compromise safety or significantly detract from successful mission accomplishment.
- A5.5.9.3. U. Improper or inappropriate operation of override commands which compromised safety of significantly detracted from successful mission accomplishment.

A5.5.10. Area C-9: Crosscheck.

- A5.5.10.1. Q. Performed proper crosscheck of aircraft instruments during all phases of flight. Maintained situational awareness as necessary to comply with ATC instructions and mission plan changes.
- A5.5.10.2. Q-. Minor deviations in crosscheck which did not compromise safety or significantly detract from successful mission accomplishment.
- A5.5.10.3. U. Improper or ineffective crosscheck. Unable to maintain situational awareness. Failed to recognize actual or potential conflicts or system faults.

A5.5.11. Area C-10: Descent, Approach, and Landing.

- A5.5.11.1. Includes Suspend command holding, enroute descent and GPS aided approach.
- A5.5.11.2. Q. Preformed correct procedures and maintained pattern to comply with ATC instructions and procedures. Maintained basic control and position orientation within aircraft performance limitations. Complied with mission plan approach and flight manual standards. Appropriate after landing checks and aircraft taxi procedures were accomplished.
- A5.5.11.3. Q-. Landing accomplished with significant deviations to established procedures but safety was not affected.
- A5.5.11.4. U. Failed to monitor landing and ground operations. Incorrect or inappropriate procedures. Unable to maintain position orientation or ATC assigned airspace. Unsafe control inputs jeopardized safety.

A5.5.12. Area C-12: NAS Rules and Procedures.

- A5.5.12.1. Q. Complied with NAS rules/requirements and airspeed restrictions or potential traffic conflicts within NAS. .
- A5.5.12.2. Q-. Same as above but minor deviations detracted from safe accomplishment of the mission.
- A5.5.12.3. U. Unfamiliar with NAS rules and procedures. Unaware of potential traffic conflicts. Did not use appropriate risk mitigating tools.

A5.6. Section D: Instrument.

A5.6.1. Area D-1 – Instrument Patterns (Downwind/Base Leg).

- A5.6.1.1. Q. Performed procedures as published or directed and IAW flight manual. Smooth and timely response to controller instruction.
- A5.6.1.2. Q-. Performed procedures with minor deviations. Slow to respond to controller instruction

A5.6.1.3. U. Performed procedures with major deviations/erratic corrections. Failed to comply with controller instruction.

A5.6.2. Area D-2 – Precision Approach (PAR or GLS).

- A5.6.2.1. Q. Performed procedures as directed and IAW applicable flight manual. Smooth and timely response to controller instruction. Complied with decision height. Position permitted a safe landing. Maintained proper/briefed airspeed. Maintained glide path with only minor deviations. Airspeed within +10/-5 KIAS. Heading within 5 degrees of controller instruction (PAR). Glide Slope/Azimuth within one dot (GLS).
- A5.6.2.2. Q-. Performed procedures with minor deviations. Slow to respond to controller's instructions. Position permitted a safe landing. Slow to correct to proper/briefed airspeed. Improper glide path control. Airspeed within +15/-7 KIAS. Heading within 10 degrees of controller instruction (PAR). Glide Slope within one dot low or two dots high/Azimuth within two dots (GLS). Initiated missed approach (if applicable) at decision height, +50/-25 ft.
- A5.6.2.3. U. Performed procedures with major deviations. Erratic corrections. Did not respond to controller instruction. Exceeded Q- limits. Did not comply with decision height and/or position did not permit a safe landing. Erratic glide path control.

A5.6.3. Area D-3– Missed Approach/Climb Out.

- A5.6.3.1. Q. Executed missed approach/climb out as published/directed. Completed all procedures IAW applicable flight manual.
- A5.6.3.2. Q-. Executed missed approach/climb out with minor deviations. Slow to comply with published procedures, controller instructions or flight manual procedures.
- A5.6.3.3. U. Executed missed approach/climb out with major deviations, or did not comply with applicable directives

A5.6.4. Area D-4 – Instrument Cross Check.

- A5.6.4.1. Q. Effective instrument cross-check. Smooth and positive aircraft control throughout flight.
- A5.6.4.2. Q-. Slow instrument cross-check. Aircraft control occasionally abrupt to compensate for recognition of errors.
- A5.6.4.3. U. Inadequate instrument cross-check. Erratic aircraft control. Exceeded Q-limits.

A5.7. Section E: Instructor.

A5.7.1. Area E-1: Instructional Ability.

- A5.7.1.1. Q. Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary.
- A5.7.1.2. Q-. Instruction was essentially correct with some deviations or omissions. Problems in communications or analysis did not degrade effectiveness of instructions.
- A5.7.1.3. U. Inability to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.

A5.7.2. Area E-2: Briefing/Debriefing.

- A5.7.2.1. Q. Briefings were well organized, accurate and thorough. Reviewed student's present level of training and defined mission events to be performed. Excellent ability during critique to reconstruct the flight, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents in accordance with prescribed directives. Training syllabi reflected actual performance of student relative to standard. Briefed the student's requirements for the next mission.
- A5.7.2.2. Q-. Minor errors or omissions in briefing, critique, and/or training documents that did not affect student progress.
- A5.7.2.3. U. Briefings were marginal or non-existent. Did not review student's training folder or past performance. Failed to adequately critique student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies. Incomplete briefing of student's training requirements/objectives for mission.

A5.7.3. Area E-3: Demonstration and Performance.

- A5.7.3.1. Q. Effectively demonstrated procedures and techniques on the ground and inflight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.
- A5.7.3.2. Q-. Minor discrepancies in the above criteria that did not affect safety or adversely affect student performance.
- A5.7.3.3. U. Did not demonstrate correct procedure or technique. Insufficient knowledge about aircraft systems, procedures, and/or proper source material.

A5.7.4. Area E-4: Conduct of the Mission.

- A5.7.4.1. Q. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.
- A5.7.4.2. Q-. Untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not effectively used to the extent specific mission objectives were not achieved.
- A5.7.4.3. U. Mission execution prevented accomplishment of a major portion of the mission. Undisciplined actions violated training rules repeatedly.

A5.8. Section F: Mission (If applicable).

A5.8.1. Area F-1: Knowledge.

- A5.8.1.1. Q. Fully knowledgeable in mission requirements, test plan directives, aircraft limitations, and partial flight manual. Effectively coordinated with other crew members and project personnel.
- A5.8.1.2. Q-. Demonstrated a limited knowledge of mission requirements, test plan directives, aircraft limitations, or the partial flight manual which degraded a portion of the mission objective or CRM.

A5.8.1.3. U. Inadequate knowledge of mission requirements, test plan directive, aircraft limitations, and partial flight manual. Did not effectively use resources. Directly affected successful mission accomplishment.

A5.8.2. Area F-2: Planning.

- A5.8.2.1. Q. Considered all factors necessary for mission accomplishment to include weather, mission profile, airspace utilization/restrictions, and proper documentation.
- A5.8.2.2. Q-. Limited consideration of all factors necessary for mission accomplishment. However, did not affect mission objective directly, but may have contributed toward lack of effective CRM.
- A5.8.2.3. U. Did not consider all factors necessary for mission accomplishment. Lack of consideration contributed negatively towards successful mission completion.

A5.8.3. Area F-3: Execution.

- A5.8.3.1. Q. Accomplished major mission objectives in a timely and skillful manner.
- A5.8.3.2. Q-. Errors or omission were made which did not render mission ineffective, but indicated a definite need for additional training.
- A5.8.3.3. U. Improper execution of duties negatively impacted mission accomplishment.

A5.8.4. **Area F-4: Security** (Critical).

- A5.8.4.1. Q. Adequate security of mission information and material was maintained throughout preflight, flight, and post flight.
- A5.8.4.2. U. Inadequate security procedures were carried out which would lead to the compromise of mission information and/or material.

A5.9. General Grading Standards (RQ-4 Sensor Operator)

- A5.9.1. The grading criteria in this attachment are divided into four sections: Ground Phase, General, Qualification, and Instructor. Use all sections for criteria applicable to the events performed on the evaluation. These areas match the graded areas for enlisted aircrew found on forms specified in AFMC Supplement to AFI 11-202V2.
- A5.9.2. Grading criteria for every situation could not possibly be covered in this attachment. The evaluator's experience and good judgment are relied upon to provide a sensible analysis of the applicable items evaluated. Where more restrictive flight manual procedures are established they will take precedence.

A5.10. Area A: Ground Phase.

A5.10.1. Area A-1: Publications.

- A5.10.1.1. Digital TO's are approved for use by individual aircrew members.
- A5.10.1.2. Q. Assigned flight publications were current, complete, and usable for any of the unit's tasking.
- A5.10.1.3. Q-. Assigned flight publications contained deviations, omissions, and/or errors; however, contained everything necessary to effectively accomplish the mission and did not compromise safety of flight.

A5.10.1.4. U. Contained major deviations, omissions, and/or errors which compromise safety of flight

A5.10.2. Area A-2: Emergency Procedures Evaluation.

- A5.10.2.1. Q. Displayed correct, immediate response to Bold Face and non-Bold Face emergency situations. Effectively used checklist.
- A5.10.2.2. Q-. Response to Bold Face emergencies 100% correct. Response to certain areas of non-Bold Face emergencies or follow-on steps to Bold Face procedures was slow/confused. Used the checklist when appropriate, but slow to locate required data.
- A5.10.2.3. U. Incorrect response for Bold Face emergency. Unable to analyze problems or take corrective action. Did not use checklist, or lacks acceptable familiarity with its arrangement or contents.

A5.11. Area B: General.

A5.11.1. **Area B-1: Safety** (Critical):

- A5.11.1.1. Q. Aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment.
- A5.11.1.2. U. Was not aware of or did not comply with all safety factors required for safe operation or mission accomplishment. Did not adequately clear. Operated the aircraft in a dangerous manner.

A5.11.2. Area B-2: Judgement (Critical):

- A5.11.2.1. Q. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.
- A5.11.2.2. U. Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that safety could have been compromised.

A5.11.3. **Area B-3: Flight Discipline** (Critical).

- A5.11.3.1. Q. Demonstrated strict professional flight and crew discipline throughout all phases of the mission.
- A5.11.3.2. U. Failed to exhibit strict flight or crew discipline. Violated or ignored rules or instructions.

A5.11.4. Area B-4: Briefings.

- A5.11.4.1. Q. Presented briefing in a professional manner. Briefing was well organized and in a logical sequence. Effective use of training aids. Concluded briefing in allotted time. Flight members clearly understood briefing. Briefed corrective action from previous mission and probable problem areas when appropriate.
- A5.11.4.2. Q-. Events out of sequence, hard to follow, some redundancy. Did not make effective use of available training aids. Dwelled on non-essential items. Briefed longer than allotted time. Limited discussion of techniques. Did not identify probable problem areas.

A5.11.4.3. U. Confusing presentation. Did not use training aids. Redundant throughout briefing. Lost interest of flight members. Presentation created doubts or confusion. Omitted major training events or did not discuss techniques. Ignored past problem areas.

A5.11.5. Area B-5: Personal Equipment.

- A5.11.5.1. Q. Thoroughly familiar with personal equipment requirements, usage, and preflight.
- A5.11.5.2. Q-. Possessed required personal equipment items and was familiar with most of the preflight and usage procedures.
- A5.11.5.3. U. Unfamiliar with required personal equipment preflight and usage.

A5.11.6. Area B-6: Forms, Reports, Logs (As Applicable).

- A5.11.6.1. Q. Completed or supervised completion of all required preflight and post flight forms and documentation without significant error.
- A5.11.6.2. Q-. Completed or supervised completion of all required preflight and post flight forms and documentation with some errors or omissions that had to be corrected.
- A5.11.6.3. U. Forms were incomplete, improperly filled out. Data on forms inaccurate detracting from recording the mission data.

A5.11.7. Area B-7: Mission/Flight Planning.

- A5.11.7.1. Q. Checked all factors applicable to flight in accordance with applicable directives. Aware of mission and alternate mission requirements and planned accordingly. Read and initialed all items in the Flight Crew Information File (FCIF)/Read Files. Prepared at briefing time.
- A5.11.7.2. Q-. Same as above, except minor error(s) or omission(s) that did not detract from mission effectiveness. Demonstrated limited knowledge of performance capabilities or approved operating procedures/ rules in some areas.
- A5.11.7.3. U. Made major error(s) or omission(s) that would have prevented a safe or effective mission. Displayed faulty knowledge of operating data or procedures. Did not review or initial FCIF items. Not prepared at briefing time.

A5.11.8. Area B-8: Use of Checklists/Test Cards.

- A5.11.8.1. Q. Procedures required by the flight manual, checklist and applicable directives were accomplished with no omissions or deviations, which detracted from the overall efficient conduct of the mission.
- A5.11.8.2. Q-. Procedures required by the flight manual, checklist and applicable directives were accomplished with omissions or deviations, which detracted from the overall efficient conduct of the mission. Performance or knowledge was the minimum acceptable and indicated a need for additional study and/or training.
- A5.11.8.3. U. Procedures required by the flight manual checklist, and applicable directives were accomplished with major omissions or deviations, which detracted from the overall efficient conduct of the mission. Performance or knowledge was unacceptable.

A5.11.9. Area B-9: Crew Coordination.

- A5.11.9.1. Q. Coordinated effectively with other crewmembers/mission personnel. Effectively used all crewmembers. Gave clear, concise crew instructions.
- A5.11.9.2. Q-. Coordinated satisfactorily with other crewmembers/mission personnel. Some instructions were not clear and concise.
- A5.11.9.3. U. Failed to coordinate with crewmembers/mission personnel. Did not give clear and concise instructions. Failed to utilize resources causing degradation of the mission.

A5.11.10. Area B-10: Communication Procedures.

- A5.11.10.1. Q. Radio and intra-cockpit communications were concise, accurate and effectively used to direct maneuvers or describe the tactical situation.
- A5.11.10.2. Q- Minor terminology errors or omissions occurred, but did not significantly detract from situational awareness, mutual support or mission accomplishment. Extraneous comments over primary or secondary radios presented minor distractions.
- A5.11.10.3. U. Radio communications over primary/secondary radios were inadequate or excessive. Inaccurate or confusing terminology significantly detracted from mutual support, situational awareness or mission accomplishment.

A5.11.11. Area B-11: Knowledge of Directives/Mission Systems.

- A5.11.11.1. Q. Demonstrated thorough knowledge of aircraft systems, limitations and performance characteristics.
- A5.11.11.2. Q-. Knowledge of aircraft systems, limitations, and performance characteristics sufficient to perform the mission safely. Demonstrated deficiencies either in depth of knowledge or comprehension.
- A5.11.11.3. U. Demonstrated unsatisfactory knowledge of aircraft systems, limitations or performance characteristics.

A5.12. Area C Qualification

- A5.12.1. **Area C-1 (SO) Air Vehicle Launch:** Includes all activity from GCS configuration up to and including established climb configuration.
 - A5.12.1.1. Q. Accomplished procedures and checklists required by the flight manual, governing directives and published unit procedures without omissions or errors. Copied the clearance, and if applicable, coordinated with the pilots on the procedures to be followed.
 - A5.12.1.2. Q-. Deviations from published standards occurred, detracting from overall mission efficiency or deviations, omissions, or errors occurred which unnecessarily delayed takeoff without rendering the mission ineffective.
 - A5.12.1.3. U. Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety .

A5.12.2. Area C-2 (SO)—Inflight Checks and Planning

- A5.12.2.1. Q. Effectively performed in-flight checks as required including changing profile by adding or deleting collections. Used current checklist and accomplished all items in proper sequence with no deviations or omissions. Effectively adapted to dynamic mission plan changes. Demonstrated ability to adjust collection profile to comply with time and fuel limitations, area weather conditions, and mission constraints and objectives.
- A5.12.2.2. Q-. In-flight checks, checklist use, and collection management included minor deviations which did not compromise safety, or significantly detract from the mission.
- A5.12.2.3. U. Did not perform in-flight checks or adapt to changing mission requirements. Used incorrect checklist, omitted checklist items or did not complete a required checklist. Unable to re-plan in-flight or adapt to changing mission requirements. Consistently unable to maintain situational awareness. Action or inaction compromised safety and successful mission accomplishment.

A5.12.3. Area C-3(SO) --Link Procedures.

- A5.12.3.1. Q. Understood and executed proper communication links protocols for effective air vehicle control, sensor/payload management, and mission accomplishment.
- A5.12.3.2. Q-. Minor errors or omissions occurred in establishing and maintaining communications links, but did not significantly detract from air vehicle control, sensor/payload management, and mission accomplishment.
- A5.12.3.3. U. Incomplete understanding of the communications links led to ineffective or improper use. Mission effectiveness was negatively impacted.

A5.12.4. Area C-4 – Sensor System Trouble Shooting (SO):

- A5.12.4.1. Q. Correctly performed sensor trouble shooting and mission planner set-up procedures IAW checklist. Correctly initiated situational awareness displays. Properly verified performed sensor trouble shooting sequence. Effectively performed initial sensor calibrations and verified sensor operation within parameters.
- A5.12.4.2. Q-. Missed minor set-up procedures with no significant impact to sensor operation or mission effectiveness.
- A5.12.4.3. U. Failed to successfully complete sensor trouble shooting or initiate situational awareness displays. Failed to verify the performed sensor trouble shooting sequence or perform initial sensor calibrations.

A5.12.5. Area C-5 – Sensor Operations (SO):

- A5.12.5.1. Q. Successfully displayed waypoints and/or created auto-tracks. Successfully tasked electro-optical (EO), infrared (IR), synthetic aperture radar (SAR), and/or moving target indicator (MTI) scenes to the pre-planned and/or auto-track waypoints. Continually monitored sensor parameters and completed actions to optimize sensor performance when required. Imaged all desired targets for optimal coverage and resolution. Appropriately ran Time-sensitive Target (TST) and/or Ad Hoc checklist. Performed correct actions to successfully recover from sensor anomalies.
- A5.12.5.2. Q-. Minor misapplications in EO, IR, SAR, and MTI sensor operations. Sensor optimization operations were not consistently verified or corrected. Slow to

- perform basic sensor operation functions. Recognized and corrected target acquisition attempts. Minor deviations on TST and/or Ad Hoc checklist. Require excessive time to recover from sensor anomalies. Minor impact to mission effectiveness
- A5.12.5.3. U. Failed to effectively conduct EO, IR, SAR, and MTI sensor operations. Did not recognize or correct target acquisition attempts. Failed to accurately collect TST and/or Ad Hoc targets. Required assistance to perform sensor optimization and/or recover from sensor anomalies. Mission effectiveness seriously impaired.
- A5.12.6. **Area C-6 After Landing (SO):** Required for all initial QUAL evaluations, optional for periodic evaluations.
 - A5.12.6.1. Q. Appropriate after landing checks accomplished IAW the flight manual and applicable directives. All required forms, reports, or logs were complete, accurate, readable, accomplished on time and IAW applicable directives. Accurate debrief of significant events to applicable agencies.
 - A5.12.6.2. Q-. Minor deviations or omissions noted in performance of after landing checks. Minor errors on forms, reports, or logs did not affect conduct of the mission. Incorrect or incomplete reporting of information due to minor errors, omissions, and/or deviations
 - A5.12.6.3. U. Major deviations or omissions were made in performance of after landing checks which could have jeopardized safety. Forms, reports, or logs were incomplete, inaccurate, or improperly filled out. Omitted or incorrectly reported significant information due to major errors, omissions, and/or deviations

A5.13. General Grading Standards (MQ-1/9 Sensor Operator).

- A5.13.1. The grading criteria in this attachment are divided into five sections: Ground Phase, General, Qualification, Instructor and Mission. Use all sections for criteria applicable to the events performed on the evaluation. These areas match the graded areas for enlisted aircrew found on forms specified in AFMC Supplement to AFI 11-202V2.
- A5.13.2. Grading criteria for every situation could not possibly be covered in this attachment. The evaluator's experience and good judgment are relied upon to provide a sensible analysis of the applicable items evaluated. Where more restrictive flight manual procedures are established they will take precedence.

A5.14. Area A: Ground Phase.

- A5.14.1. Area A-1: Publications.
 - A5.14.1.1. Digital TO's are approved for use by individual aircrew members.
 - A5.14.1.2. Q. Assigned flight publications were current, complete, and usable for any of the unit's tasking.
 - A5.14.1.3. Q-. Assigned flight publications contained deviations, omissions, and/or errors; however, contained everything necessary to effectively accomplish the mission and did not compromise safety of flight.
 - A5.14.1.4. U. Contained major deviations, omissions, and/or errors which compromise safety of flight

A5.14.2. Area A-2: Emergency Procedures Evaluation.

- A5.14.2.1. Q. Displayed correct, immediate response to Bold Face and non-Bold Face emergency situations. Effectively used checklist.
- A5.14.2.2. Q-. Response to Bold Face emergencies 100% correct. Response to certain areas of non-Bold Face emergencies or follow-on steps to Bold Face procedures was slow/confused. Used the checklist when appropriate, but slow to locate required data.
- A5.14.2.3. U. Incorrect response for Bold Face emergency. Unable to analyze problems or take corrective action. Did not use checklist, or lacks acceptable familiarity with its arrangement or contents.

A5.15. Area B: General.

A5.15.1. Area B-1: Safety (Critical):

- A5.15.1.1. Q. Aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment.
- A5.15.1.2. U. Not aware of or did not comply with all safety factors required for safe aircraft operation or mission accomplishment. A clear lack of judgment hampered or precluded mission accomplishment. Allowed a dangerous situation to develop without taking proper corrective action or notifying other crew members.

A5.15.2. Area B-2: Judgement (Critical):

- A5.15.2.1. Q. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.
- A5.15.2.2. U. Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that safety could have been compromised.

A5.15.3. Area B-3: Flight Discipline (Critical).

- A5.15.3.1. Q. Demonstrated strict professional flight and crew discipline throughout all phases of the mission.
- A5.15.3.2. U. Failed to exhibit strict flight or crew discipline. Violated or ignored rules or instructions.

A5.15.4. Area B-4: Briefings.

- A5.15.4.1. Q. Presented briefing in a professional manner. Briefing was well organized and in a logical sequence. Effective use of training aids. Concluded briefing in allotted time. Flight members clearly understood briefing. Briefed corrective action from previous mission and probable problem areas when appropriate.
- A5.15.4.2. Q-. Events out of sequence, hard to follow, some redundancy. Did not make effective use of available training aids. Dwelled on non-essential items. Briefed longer than allotted time. Limited discussion of techniques. Did not identify probable problem areas.

A5.15.4.3. U. Confusing presentation. Did not use training aids. Redundant throughout briefing. Lost interest of flight members. Presentation created doubts or confusion. Omitted major training events or did not discuss techniques. Ignored past problem areas.

A5.15.5. Area B-5: Personal Equipment.

- A5.15.5.1. Q. Thoroughly familiar with personal equipment requirements, usage, and preflight.
- A5.15.5.2. Q-. Possessed required personal equipment items and was familiar with most of the preflight and usage procedures.
- A5.15.5.3. U. Unfamiliar with required personal equipment preflight and usage.

A5.15.6. Area B-6: Forms, Reports, Logs (As Applicable).

- A5.15.6.1. Q. Completed or supervised completion of all required preflight and post flight forms and documentation without significant error.
- A5.15.6.2. Q-. Completed or supervised completion of all required preflight and post flight forms and documentation with some errors or omissions that had to be corrected.
- A5.15.6.3. U. Forms were incomplete, improperly filled out. Data on forms inaccurate detracting from recording the mission data.

A5.15.7. Area B-7: Mission/Flight Planning.

- A5.15.7.1. Q. Checked all factors applicable to flight in accordance with applicable directives. Aware of mission and alternate mission requirements and planned accordingly. Read and initialed all items in the Flight Crew Information File (FCIF)/Read Files. Prepared at briefing time.
- A5.15.7.2. Q-. Same as above, except minor error(s) or omission(s) that did not detract from mission effectiveness. Demonstrated limited knowledge of performance capabilities or approved operating procedures/ rules in some areas.
- A5.15.7.3. U. Made major error(s) or omission(s) that would have prevented a safe or effective mission. Displayed faulty knowledge of operating data or procedures. Did not review or initial FCIF items. Not prepared at briefing time.

A5.15.8. Area B-8: Use of Checklists/Test Cards.

- A5.15.8.1. Q. Procedures required by the flight manual, checklist and applicable directives were accomplished with no omissions or deviations, which detracted from the overall efficient conduct of the mission.
- A5.15.8.2. Q-. Procedures required by the flight manual, checklist and applicable directives were accomplished with omissions or deviations, which detracted from the overall efficient conduct of the mission. Performance or knowledge was the minimum acceptable and indicated a need for additional study and/or training.
- A5.15.8.3. U. Procedures required by the flight manual checklist, and applicable directives were accomplished with major omissions or deviations, which detracted from the overall efficient conduct of the mission. Performance or knowledge was unacceptable.

A5.15.9. Area B-9: Crew Coordination.

- A5.15.9.1. Q. Coordinated effectively with other crewmembers/mission personnel. Effectively used all crewmembers. Gave clear, concise crew instructions.
- A5.15.9.2. Q-. Coordinated satisfactorily with other crewmembers/mission personnel. Some instructions were not clear and concise.
- A5.15.9.3. U. Failed to coordinate with crewmembers/mission personnel. Did not give clear and concise instructions. Failed to utilize resources causing degradation of the mission.

A5.15.10. Area B-10: Communication Procedures.

- A5.15.10.1. Q. Radio and intra-cockpit communications were concise, accurate and effectively used to direct maneuvers or describe the tactical situation.
- A5.15.10.2. Q- Minor terminology errors or omissions occurred, but did not significantly detract from situational awareness, mutual support or mission accomplishment. Extraneous comments over primary or secondary radios presented minor distractions.
- A5.15.10.3. U. Radio communications over primary/secondary radios were inadequate or excessive. Inaccurate or confusing terminology significantly detracted from mutual support, situational awareness or mission accomplishment.

A5.15.11. Area B-11: Knowledge of Directives/Mission Systems.

- A5.15.11.1. Q. Demonstrated thorough knowledge of aircraft systems, limitations and performance characteristics.
- A5.15.11.2. Q-. Knowledge of aircraft systems, limitations, and performance characteristics sufficient to perform the mission safely. Demonstrated deficiencies either in depth of knowledge or comprehension.
- A5.15.11.3. U. Demonstrated unsatisfactory knowledge of aircraft systems, limitations or performance characteristics.

A5.16. Area C Qualification.

- A5.16.1. Area C-1 (SO) Air Vehicle Launch (SO): Includes all activity from GCS configuration up to and including established climb configuration.
 - A5.16.1.1. Q. Accomplished procedures and checklists required by the flight manual, governing directives and published unit procedures without omissions or errors. Copied the clearance, and if applicable, coordinated with the pilots on the procedures to be followed.
 - A5.16.1.2. Q-. Deviations from published standards occurred, detracting from overall mission efficiency or deviations, omissions, or errors occurred which unnecessarily delayed takeoff without rendering the mission ineffective.
 - A5.16.1.3. U. Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety .
- A5.16.2. **Area C-2 (SO)--Payload Operation.** This area includes knowledge and function of the heads-up display, tracker display, and pedestal controls.

- A5.16.2.1. Q. Demonstrated satisfactory capability to collect imagery using all available sensors. Used appropriate focus, iris, and zoom settings. Satisfactory knowledge of menu buttons. Correctly prioritized multiple tasks. Able to identify target's position at all times
- A5.16.2.2. Q-. Minor errors in procedures/equipment use in collecting imagery. Slow to focus or zoom. Had some problems locating correct menu buttons. Did not consistently or correctly prioritize multiple tasks. Had some difficulty or could not determine exact position of targets.
- A5.16.2.3. U. Major errors in procedures/equipment use in collecting imagery. Could not locate target position. Could not focus. Inadvertently selected a critical menu button. Unable to correctly prioritize multiple tasks. Failed communicate or acknowledge workload and task distribution.

A5.16.3. Area C-3 -- Ku-Band Data Link Operation.

- A5.16.3.1. Q. Demonstrated satisfactory capability to configure and collect stationary and mobile targets using Ku mode. Followed approved checklist/procedures to configure payload rack for Ku operations. Aware of target's position at all times. Correctly prioritized multiple tasks.
- A5.16.3.2. Q-. Minor errors or omissions in using approved checklists/procedures to configure Pilot/ Sensor Operator (PSO) rack for Ku operations. Had some difficulty in establishing exact position of targets or tracking mobile targets. Did not consistently or correctly prioritize multiple tasks.
- A5.16.3.3. U. Major errors in procedures/equipment use in configuring and/or collecting targets. Failed to use approved checklist/procedures to configure payload rack for Ku operations. Could not establish target position, unable to maintain mobile target track. Could not focus. Selected a critical menu button. Unable to correctly prioritize multiple tasks. Failed communicate or acknowledge workload and task distribution.
- A5.16.4. **Area C-4 Air Vehicle Recovery (SO)**: This area includes all activity from start of the Descent through the Before Landing checklist. Sensor Operator must observe a full stop or touch and go landing or low approach from the right seat. Required for all initial QUAL evaluations, optional for periodic evaluations.
 - A5.16.4.1. Q. Accomplished procedures and checklists required by the flight manual and governing directives accurately and effectively. Monitored aircraft position and approach instructions and notified pilots of deviation. Monitored Tracker display and ensured terrain clearance. Gathered and cross checked all available data in a timely manner, and appropriately identified contingencies and alternatives.
 - A5.16.4.2. Q-. Accomplished procedures and checklists required by the flight manual and governing directives with minor omissions, deviations or errors. Monitored aircraft position and approach instructions and notified pilots of deviations. Failed to monitor Tracker
 - A5.16.4.3. U. Not up to "Q-" standards. Errors or omissions could have jeopardized mission accomplishment or flight safety. Made no effort to effort to gather and cross check available data before identifying any contingencies or alternatives.

A5.17. Section D: Instructor.

A5.17.1. Area D-1: Instructional Ability.

- A5.17.1.1. Q. Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary.
- A5.17.1.2. Q-. Instruction was essentially correct with some deviations or omissions. Problems in communications or analysis did not degrade effectiveness of instructions.
- A5.17.1.3. U. Inability to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.

A5.17.2. Area D-2: Briefing/Debriefing.

- A5.17.2.1. Q. Briefings were well organized, accurate and thorough. Reviewed student's present level of training and defined mission events to be performed. Excellent ability during critique to reconstruct the flight, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents in accordance with prescribed directives. Training syllabi reflected actual performance of student relative to standard. Briefed the student's requirements for the next mission.
- A5.17.2.2. Q-. Minor errors or omissions in briefing, critique, and/or training documents that did not affect student progress.
- A5.17.2.3. U. Briefings were marginal or non-existent. Did not review student's training folder or past performance. Failed to adequately critique student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies. Incomplete briefing of student's training requirements/objectives for mission.

A5.17.3. Area D-3: Demonstration and Performance.

- A5.17.3.1. Q. Effectively demonstrated procedures and techniques on the ground and inflight. Demonstrated thorough knowledge of aircraft systems, procedures, and all applicable publications and regulations.
- A5.17.3.2. Q-. Minor discrepancies in the above criteria that did not affect safety or adversely affect student performance.
- A5.17.3.3. U. Did not demonstrate correct procedure or technique. Insufficient knowledge about aircraft systems, procedures, and/or proper source material.

A5.17.4. Area D-4: Conduct of the Mission.

- A5.17.4.1. Q. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.
- A5.17.4.2. Q-. Untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not effectively used to the extent specific mission objectives were not achieved.
- A5.17.4.3. U. Mission execution prevented accomplishment of a major portion of the mission. Undisciplined actions violated training rules repeatedly.

A5.18. Section E: Mission (If Applicable).

A5.18.1. Area E-1: Knowledge.

- A5.18.1.1. Q. Fully knowledgeable in mission requirements, test plan directives, aircraft limitations, and partial flight manual. Effectively coordinated with other crew members and project personnel.
- A5.18.1.2. Q-. Demonstrated a limited knowledge of mission requirements, test plan directives, aircraft limitations, or the partial flight manual which degraded a portion of the mission objective or CRM.
- A5.18.1.3. U. Inadequate knowledge of mission requirements, test plan directive, aircraft limitations, and partial flight manual. Did not effectively use resources. Directly affected successful mission accomplishment.

A5.18.2. Area E-2: Planning.

- A5.18.2.1. Q. Considered all factors necessary for mission accomplishment to include weather, mission profile, airspace utilization/restrictions, and proper documentation.
- A5.18.2.2. Q-. Limited consideration of all factors necessary for mission accomplishment. However, did not affect mission objective directly, but may have contributed toward lack of effective CRM.
- A5.18.2.3. U. Did not consider all factors necessary for mission accomplishment. Lack of consideration contributed negatively towards successful mission completion.

A5.18.3. Area E-3: Execution.

- A5.18.3.1. Q. Accomplished major mission objectives in a timely and skillful manner.
- A5.18.3.2. Q-. Errors or omission were made which did not render mission ineffective, but indicated a definite need for additional training.
- A5.18.3.3. U. Improper execution of duties negatively impacted mission accomplishment.

A5.18.4. Area E-4: Security (Critical).

- A5.18.4.1. Q. Adequate security of mission information and material was maintained throughout preflight, flight, and post flight.
- A5.18.4.2. U. Inadequate security procedures were carried out which would lead to the compromise of mission information and/or material.

ATTACHMENT 6

AIR BATTLE MANAGER/MISSION CREW COMMANDER/AIR SURVEILLANCE OFFICER/SENIOR DIRECTOR (ABM/MCC/ASO/SD) EVALUATION CRITERIA

A6.1. General Grading Standards.

A6.1.1. The grading criteria in this attachment are divided into four sections: Ground Phase, General, Qualification and Instructor. Use all sections for criteria applicable to the events performed on the evaluation. These areas match the graded areas for ABMs found on forms specified in AFMC Supplement to AFI 11-202V2.

A6.2. Area A: Ground Phase.

A6.2.1. Area A-1: Publications.

- A6.2.1.1. Digital TO's are approved for use by individual aircrew members.
- A6.2.1.2. Q. Assigned flight publications were current, complete and usable for any of the unit's taskings.
- A6.2.1.3. Q-. Assigned flight publications contained deviations, omissions and/or errors; however, contained everything necessary to effectively accomplish the mission and did not compromise safety of flight.
- A6.2.1.4. U. Assigned flight publications contained deviations, omissions and/or errors compromised safety of flight.

A6.2.2. Area A-2: Emergency Procedures Evaluation.

- A6.2.2.1. Q. Displayed correct and timely response to emergency situation. Effectively used checklist.
- A6.2.2.2. Q-. Response to emergency situation was slow/confused. Used checklist when appropriate, but slow to locate required action.
- A6.2.2.3. U. Incorrect response to emergency situation. Unable to analyze problem or take corrective action. Did not use checklist, or lacks acceptable familiarity with its arrangement or content.

A6.3. Area B: General.

A6.3.1. Area B-1: Safety (Critical).

- A6.3.1.1. Q. Aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment.
- A6.3.1.2. U. Was not aware of or did not comply with all safety factors required for safe aircraft operation and mission accomplishment. Operated aircraft equipment in a dangerous manner.

A6.3.2. Area B-2: Judgment (Critical).

A6.3.2.1. Q. Executed the assigned mission in a timely efficient manner. Conducted the mission with a sense of understanding and comprehension.

A6.3.2.2. U. Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that safety could have been compromised.

A6.3.3. **Area B-3: Flight Discipline** (Critical).

- A6.3.3.1. Q. Demonstrated strict professional flight and crew discipline throughout all phases of the mission.
- A6.3.3.2. U. Failed to exhibit strict flight or crew discipline. Violated or ignored rules or instructions.

A6.3.4. Area B-4: Briefings.

- A6.3.4.1. Q. Well organized and presented in a logical, professional fashion. Crewmembers clearly understood mission requirements.
- A6.3.4.2. Q-. Events out of sequence, hard to follow, some redundancy. Dwelled on non-essential mission items.
- A6.3.4.3. U. Confusing presentation. Redundant throughout the briefing. Lost interest of crewmembers. Presentation created doubts or confusion. Omitted major mission requirements.

A6.3.5. Area B-5: Personal Equipment.

- A6.3.5.1. Q. Thoroughly familiar with personal equipment requirements, usage and preflight.
- A6.3.5.2. Q-. Possessed required personal equipment and was familiar with most requirements, usage, and preflight procedures.
- A6.3.5.3. U. Unfamiliar with personal equipment requirements, usage and preflight.

A6.3.6. **Area B-6: Forms, Reports, Logs** (as applicable).

- A6.3.6.1. Q. Completed or supervised completion of all required forms without significant error.
- A6.3.6.2. Q-. Completed or supervised completion of all required forms with some errors or omissions that had to be corrected.
- A6.3.6.3. U. Forms were incomplete, improperly filled out. Data on forms inaccurate, detracting from recording the mission data.

A6.3.7. Area B-7: Mission/Flight Planning.

- A6.3.7.1. Q. Developed a sound plan to accomplish the mission. Checked all factors applicable to mission in accordance with applicable directives. Aware of alternatives available, if mission cannot be completed as planned. Prepared at briefing time.
- A6.3.7.2. Q-. Same as above, except minor error(s) or omission(s) that did not detract from mission effectiveness. Demonstrated limited knowledge of capabilities or operating procedures/rules in some areas.

A6.3.7.3. U. Made major error(s) or omission(s) that would have prevented a safe or effective mission. Displayed faulty knowledge of operating procedures. Not prepared at briefing time.

A6.3.8. Area B-8: Use of Checklists.

- A6.3.8.1. Q. Used current checklist and accomplished all items in proper sequence with no deviations or omissions.
- A6.3.8.2. Q. Only minor deviations from checklist procedures were noted.
- A6.3.8.3. U. Failed to use current checklist or deviated from checklist procedures resulting in the mission being compromised.

A6.3.9. Area B-9: Crew Resource Management.

- A6.3.9.1. Q. Coordinated effectively with other crewmembers/mission personnel. Effectively used all crewmembers. Gave clear, concise crew instructions.
- A6.3.9.2. Q-. Coordinated satisfactorily with other crewmembers/mission personnel. Some instructions were not clear and concise.
- A6.3.9.3. U. Failed to coordinate with crewmembers/mission personnel. Did not give clear and concise instructions. Failed to utilize resources causing degradation of the mission.

A6.3.10. Area B-10: Communication Procedures.

- A6.3.10.1. Q. Operated communication equipment correctly. Radio and ICS communications were concise, accurate and effective.
- A6.3.10.2. Q- Operated communication equipment with delays or errors that did not affect mission accomplishment. Minor terminology errors or omissions occurred, but did not significantly detract from situational awareness, mutual support or mission accomplishment. Extraneous comments over primary or secondary radios presented minor distractions.
- A6.3.10.3. U. Failed to operate communication equipment correctly. Radio communications over primary/secondary radios were inadequate or excessive. Inaccurate or confusing terminology significantly detracted from mutual support, situational awareness or mission accomplishment.

A6.3.11. Area B-11: Knowledge of Directives.

- A6.3.11.1. Q. Demonstrated thorough knowledge of applicable directives.
- A6.3.11.2. Q-. Minor errors in knowledge of applicable directives. Demonstrated deficiencies either in depth of knowledge or comprehension.
- A6.3.11.3. U. Demonstrated unsatisfactory knowledge of applicable directives.

A6.4. Area C: Qualification.

- A6.4.1. Area C-1: Preflight Inspection
- A6.4.2. Area C-2: Console Operations and Displays
- A6.4.3. Area C-3: Mission Execution

- A6.4.4. The following criteria will be used to evaluate qualification procedures identified in paragraph A6.4.1 A6.4.3
 - A6.4.4.1. Q. Procedures required by the flight manual, checklist and applicable directives were accomplished with no omissions or deviations, which detracted from the overall efficient conduct of the mission.
 - A6.4.4.2. Q-. Procedures required by the flight manual, checklist and applicable directives were accomplished with omissions or deviations which detracted from the overall efficient conduct of the mission. Performance or knowledge was the minimum acceptable and indicated a need for additional study and/or training.
 - A6.4.4.3. U. Procedures required by the flight manual, checklist and applicable directives were accomplished with major omissions or deviations, which detracted from the overall efficient conduct of the mission. Performance or knowledge was unacceptable.

A6.4.5. Area C-4: Systems Knowledge.

- A6.4.5.1. Q. Thorough knowledge of aircraft systems, limitations, and performance characteristics.
- A6.4.5.2. Q-. Knowledge of aircraft systems, limitation, and performance characteristics sufficient to perform the mission safely. Deficiencies either in depth of knowledge or comprehension.
- A6.4.5.3. U. Unfamiliar with systems operation. Unable to recall details, ops limits, or operational processes.

A6.5. Area D: Instructor.

A6.5.1. Area D-1: Instructional Ability.

- A6.5.1.1. Q. Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary.
- A6.5.1.2. Q-. Instruction was essentially correct with some deviations or omissions. Problems in communications or analysis did not degrade effectiveness of instructions.
- A6.5.1.3. U. Inability to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.

A6.5.2. Area D-2: Briefing/Debriefing.

- A6.5.2.1. Q. Briefings were well organized, accurate and thorough. Reviewed student's present level of training and defined mission events to be performed. Excellent ability during critique to reconstruct the flight, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents in accordance with prescribed directives. Training syllabi reflected actual performance of student relative to standard. Pre-briefed the student's requirements for the next mission.
- A6.5.2.2. Q-. Minor errors or omissions in briefing, critique, and/or training documents that did not affect student progress.

A6.5.2.3. U. Briefings were marginal or non-existent. Did not review student's training folder or past performance. Failed to adequately critique student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies. Incomplete pre-briefing of student's training requirements/ objectives for mission.

A6.5.3. Area D-3: Demonstration and Performance

- A6.5.3.1. Q. Effectively demonstrated procedures and techniques on the ground and inflight. Demonstrated thorough knowledge of mission systems, procedures and all applicable publications and regulations.
- A6.5.3.2. Q-. Minor discrepancies in the above criteria that did not affect safety or adversely affect student performance.
- A6.5.3.3. U. Did not demonstrate correct procedure or technique. Insufficient knowledge about mission systems, procedures, and/or proper source material.

A6.5.4. Area D-4: Conduct of the Mission

- A6.5.4.1. Q. Executed the assigned mission in a timely, efficient manner. Conducted the flight with a sense of understanding and comprehension.
- A6.5.4.2. Q-. Untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not effectively used to the extent specific mission objectives were not achieved.
- A6.5.4.3. U. Mission execution prevented accomplishment of a major portion of the mission. Undisciplined actions violated training rules repeatedly.

ATTACHMENT 7

ACTIVE NON-RATED AIRCREW EVALUATION CRITERIA

A7.1. General Grading Standards.

A7.1.1. The grading criteria in this attachment are divided into four sections: Ground Phase, General, Qualification and Instructor. Use all sections for criteria applicable to the events performed on the evaluation. These areas match the graded areas for Active Non-Rated Aircrew found on forms specified in AFMC Supplement to AFI 11-202V2.

A7.2. Area A: Ground Phase.

A7.2.1. Area A-1: Publications (as assigned/issued).

- A7.2.1.1. Digital TO's are approved for use by individual aircrew members.
- A7.2.1.2. Q. Assigned flight publications were current, complete and usable for any of the unit's taskings.
- A7.2.1.3. Q-. Assigned flight publications contained deviations, omissions and/or errors; however, contained everything necessary to effectively accomplish the mission and did not compromise safety of flight.
- A7.2.1.4. U. Assigned flight publications contained deviations, omissions and/or errors compromised safety of flight.

A7.3. Area B: General.

A7.3.1. Area B-1: Safety (Critical).

- A7.3.1.1. Q. Aware of and complied with all safety factors required for safe aircraft operation and mission accomplishment.
- A7.3.1.2. U. Was not aware of or did not comply with all safety factors required for safe aircraft operation and mission accomplishment. Operated aircraft equipment in a dangerous manner.

A7.3.2. **Area B-2: Judgment** (Critical).

- A7.3.2.1. Q. Executed the assigned mission in a timely efficient manner. Conducted the mission with a sense of understanding and comprehension.
- A7.3.2.2. U. Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment to the extent that safety could have been compromised.

A7.3.3. Area B-3: Briefings (if applicable).

- A7.3.3.1. Q. Well organized and presented in a logical, professional fashion. Crewmembers clearly understood mission requirements.
- A7.3.3.2. Q-. Events out of sequence, hard to follow, some redundancy. Dwelled on non-essential mission items.

A7.3.3.3. U. Confusing presentation. Redundant throughout the briefing. Lost interest of crewmembers. Presentation created doubts or confusion. Omitted major mission requirements.

A7.3.4. Area B-4: Personal Equipment.

- A7.3.4.1. Q. Thoroughly familiar with personal equipment requirements, usage and preflight.
- A7.3.4.2. Q-. Possessed required personal equipment and was familiar with most requirements, usage, and preflight procedures.
- A7.3.4.3. U. Unfamiliar with personal equipment requirements, usage and preflight.

A7.3.5. Area B-5: Mission Planning (if applicable).

- A7.3.5.1. Q. Developed a sound plan to accomplish the mission. Checked all factors applicable to mission in accordance with applicable directives. Aware of alternatives available, if mission cannot be completed as planned. Prepared at briefing time.
- A7.3.5.2. Q-. Same as above, except minor error(s) or omission(s) that did not detract from mission effectiveness. Demonstrated limited knowledge of capabilities or operating procedures/rules in some areas.
- A7.3.5.3. U. Made major error(s) or omission(s) that would have prevented a safe or effective mission. Displayed faulty knowledge of operating procedures. Not prepared at briefing time.

A7.3.6. Area B-6: Use of Checklists (if applicable).

- A7.3.6.1. Q. Used current checklist and accomplished all items in proper sequence with no deviations or omissions.
- A7.3.6.2. Q. Only minor deviations from checklist procedures were noted.
- A7.3.6.3. U. Failed to use current checklist or deviated from checklist procedures resulting in the mission being compromised.

A7.3.7. Area B-7: Crew Resource Management.

- A7.3.7.1. Q. Coordinated effectively with other crewmembers/mission personnel. Effectively used all crewmembers. Gave clear, concise crew instructions.
- A7.3.7.2. Q-. Coordinated satisfactorily with other crewmembers/mission personnel. Some instructions were not clear and concise.
- A7.3.7.3. U. Failed to coordinate with crewmembers/mission personnel. Did not give clear and concise instructions. Failed to utilize resources causing degradation of the mission.

A7.3.8. Area B-8: Communication Procedures.

- A7.3.8.1. Q. Operated communication equipment correctly. Radio and ICS communications were concise, accurate and effective.
- A7.3.8.2. Q- Operated communication equipment with delays or errors that did not affect mission accomplishment. Minor terminology errors or omissions occurred, but did not

significantly detract from situational awareness, mutual support or mission accomplishment. Extraneous comments over primary or secondary radios presented minor distractions.

A7.3.8.3. U. Failed to operate communication equipment correctly. Radio communications over primary/secondary radios were inadequate or excessive. Inaccurate or confusing terminology significantly detracted from mutual support, situational awareness or mission accomplishment.

A7.3.9. Area B-9: Knowledge of Directives.

- A7.3.9.1. Q. Demonstrated thorough knowledge of applicable directives.
- A7.3.9.2. Q-. Minor errors in knowledge of applicable directives. Demonstrated deficiencies either in depth of knowledge or comprehension.
- A7.3.9.3. U. Demonstrated unsatisfactory knowledge of applicable directives.

A7.4. Area C: Qualification.

A7.4.1. Area C-1: Preflight Inspection (if applicable)

- A7.4.1.1. Q. Completed a thorough preflight, check of personal equipment, crew briefing, etc. Accurately determined readiness of aircraft for flight.
- A7.4.1.2. Q-. Minor procedural deviations which did not detract from the overall mission.
- A7.4.1.3. U. Major deviations in procedure which would preclude safe mission accomplishment. Failed to accurately determine readiness of aircraft for flight. Errors directly contributed to a late takeoff which degraded the mission or made it non-effective.

A7.4.2. Area C-2: Emergency Equipment.

- A7.4.2.1. Q. Demonstrated and/or verbally explained system equipment operation, component location, and limitations with only minor discrepancies which did not detract from mission effectiveness.
- A7.4.2.2. Q-. Demonstration and/or explanation of system/equipment adequate but indicated a definite need for additional study and training.
- A7.4.2.3. U. Knowledge of system/ equipment was unacceptable.

A7.4.3. Area C-3: Emergency Egress.

- A7.4.3.1. Q. Demonstrated and/or verbally explained egress procedures and equipment operation, component location, and limitations with only minor discrepancies which did not detract from mission effectiveness.
- A7.4.3.2. Q-. Demonstration and/or explanation of egress procedures and/or associated equipment adequate but indicated a definite need for additional study and training.
- A7.4.3.3. U. Knowledge of egress procedures and/or associated equipment was unacceptable.

A7.4.4. Area C-4: Mission Execution (if applicable)

- A7.4.4.1. Mission execution may be accomplished in the aircraft or in a support facility (control room)
- A7.4.4.2. Q. Procedures required by the flight manual, checklist and applicable directives were accomplished with no omissions or deviations, which detracted from the overall efficient conduct of the mission.
- A7.4.4.3. Q-. Procedures required by the flight manual, checklist and applicable directives were accomplished with omissions or deviations which detracted from the overall efficient conduct of the mission. Performance or knowledge was the minimum acceptable and indicated a need for additional study and/or training.
- A7.4.4.4. U. Procedures required by the flight manual, checklist and applicable directives were accomplished with major omissions or deviations, which detracted from the overall efficient conduct of the mission. Performance or knowledge was unacceptable.

A7.4.5. Area C-5: Systems Knowledge.

- A7.4.5.1. Q. Thorough knowledge of aircraft systems, limitations, and performance characteristics.
- A7.4.5.2. Q-. Knowledge of aircraft systems, limitation, and performance characteristics sufficient to perform the mission safely. Deficiencies either in depth of knowledge or comprehension.
- A7.4.5.3. U. Unfamiliar with systems operation. Unable to recall details, ops limits, or operational processes.

A7.5. Area D: Instructor.

A7.5.1. Area D-1: Instructional Ability.

- A7.5.1.1. Q. Demonstrated ability to communicate effectively. Provided appropriate corrective guidance when necessary.
- A7.5.1.2. Q-. Instruction was essentially correct with some deviations or omissions. Problems in communications or analysis did not degrade effectiveness of instructions.
- A7.5.1.3. U. Inability to effectively communicate with the student. Did not provide corrective action where necessary. Did not plan ahead or anticipate student problems.

A7.5.2. Area D-2: Briefing/Debriefing.

- A7.5.2.1. Q. Briefings were well organized, accurate and thorough. Reviewed student's present level of training and defined mission events to be performed. Excellent ability during critique to reconstruct the flight, offer mission analysis, and provide corrective guidance where appropriate. Completed all training documents in accordance with prescribed directives. Training syllabi reflected actual performance of student relative to standard. Pre-briefed the student's requirements for the next mission.
- A7.5.2.2. Q-. Minor errors or omissions in briefing, critique, and/or training documents that did not affect student progress.

A7.5.2.3. U. Briefings were marginal or non-existent. Did not review student's training folder or past performance. Failed to adequately critique student or provide complete mission analysis. Training syllabi grade did not reflect actual performance of student. Comments in training folder were incomplete. Strengths and weaknesses were not identified. Overlooked or omitted major discrepancies. Incomplete pre-briefing of student's training requirements/ objectives for mission.

A7.5.3. Area D-3: Demonstration and Performance

- A7.5.3.1. Q. Effectively demonstrated procedures and techniques on the ground and inflight. Demonstrated thorough knowledge of mission systems, procedures and all applicable publications and regulations.
- A7.5.3.2. Q-. Minor discrepancies in the above criteria that did not affect safety or adversely affect student performance.
- A7.5.3.3. U. Did not demonstrate correct procedure or technique. Insufficient knowledge about mission systems, procedures, and/or proper source material.

A7.5.4. Area D-4: Conduct of the Mission

- A7.5.4.1. Mission execution may be accomplished in the aircraft or in a support facility (control room)
- A7.5.4.2. Q. Executed the assigned mission in a timely, efficient manner. Conducted the flight (if applicable) with a sense of understanding and comprehension.
- A7.5.4.3. Q-. Untimely or inappropriate decisions degraded or prevented accomplishment of a portion of the mission. Resources were not effectively used to the extent specific mission objectives were not achieved.
- A7.5.4.4. U. Mission execution prevented accomplishment of a major portion of the mission. Undisciplined actions violated training rules repeatedly.